HANDELSHOCHSCHULE LEIPZIG 1898

HHL LEIPZIG GRADUATE SCHOOL OF MANAGEMENT

Dissertation

Goodwill-Bilanzierung nach internationalen Rechnungslegungsstandards

Tobias Stork genannt Wersborg

E-Mail: tobias.stork-wersborg@hhl.de

Abstract:
Die vorliegende Dissertationsschrift umfasst die bilanzielle Behandlung des Goodwills nach internationalen Rechnungslegungsstandards. Dabei werden akademische und praxisnahe Fragestellungen berücksichtigt. Der Grundlagenteil illustriert vorhandene Ermessensspielräume für die Bilanzierenden im Rahmen der Ermittlung beizulegender Zeitwerte und Werthaltigkeitsprüfungen. Weiterführend werden zur Goodwill-Bilanzierung bestehende Lücken in den Rechnungslegungsstandards bzw. im einschlägigen Schrifttum identifiziert und diskutiert. Im Ergebnis soll die Dissertation einen Beitrag zur kritischen Würdigung ausgewählter Aspekte der Goodwill-Bilanzierung auf Basis der internationalen Rechnungslegungsstandards leisten und gezielt Lösungsvorschläge und Verbesserungsmöglichkeiten aufzeigen.

Goodwill-Bilanzierung nach internationalen Rechnungslegungsstandards

Kumulative Dissertation zur Erlangung des

Doktorgrades der Wirtschaftswissenschaften (Dr. rer. oec.)

an der
HHL Leipzig Graduate School of Management

vorgelegt von

Tobias Stork genannt Wersborg

Leipzig, am 30. November 2014

Erstgutachter:

Prof. Dr. Henning Zülch

HHL Leipzig Graduate School of Management
Lehrstuhl für Rechnungswesen, Wirtschaftsprüfung und Controlling

Zweitgutachter:

Prof. Dr. Torsten Wulf

Philipps Universität Marburg
Lehrstuhl für Strategisches und Internationales Management

INHALTSÜBERSICHT

Inhaltsverzeichnis

I.
Goodwill-Bilanzierung nach internationalen Rechnungslegungsstandards – Gesamtdarstellung der kumulativen Dissertation

Tobias Stork genannt Wersborg
Research Associate
HHL Leipzig Graduate School of Management
Chair of Accounting and Auditing
Jahnallee 59, D-04109 Leipzig
email: Tobias.Stork-Wersborg@hhl.de
Telefon +49 (0) 3 41 – 9851 676

I. Goodwill-Bilanzierung nach internationalen Rechnungslegungsstandards – Gesamtdarstellung der kumulativen Dissertation

1 Übergeordneter Forschungszusammenhang

Die erstmalige Erfassung eines Goodwills folgt aus der bilanziellen Abbildung eines Unternehmenserwerbs nach dem International Financial Reporting Standard (IFRS) 3 „Unternehmenszusammenschlüsse". Dieser Rechnungslegungsstandard wurde im März 2004 vom International Accounting Standards Board (IASB) veröffentlicht und ist auf Berichtsperioden, die am oder nach dem 31. März 2004 beginnen, anzuwenden. Ab diesem Zeitpunkt sind alle Unternehmenserwerbe nicht mehr gemäß der Interessenzusammenführungsmethode, sondern ausschließlich nach der Akquisitionsmethode zu bilanzieren. Sämtliche identifizierbaren Vermögenswerte und Schulden des erworbenen Unternehmens sind in der Folge zum Akquisitionsstichtag mit dem beizulegenden Zeitwert (fair value) anstatt mit fortgeführten Anschaffungs- oder Herstellungskosten anzusetzen. Die Höhe des Goodwills bestimmt sich als Residual über eine Subtraktion der zum beizulegenden Zeitwert bewerteten erworbenen Nettovermögenswerte vom beizulegenden Zeitwert der übertragenen Gegenleistung (IFRS 3.32). Der Goodwill setzt sich aus nicht bilanzierungsfähigen Vermögenswerten und Schulden zusammen, welche einen künftigen wirtschaftlichen Nutzen aufweisen, indes weder separierbar noch identifizierbar sind.

Für die Bewertung der erworbenen Vermögenswerte und übernommenen Schulden zum beizulegenden Zeitwert ist nunmehr der im Jahr 2011 vom IASB verabschiedete Standard IFRS 13 „Bemessung des beizulegenden Zeitwerts" maßgeblich. Hierin wurden die Bewertungsvorschriften, die bislang in den einzelnen Standards enthalten waren, in einem übergeordneten Standard zusammengeführt. Der Regelungsinhalt des IFRS 13 berücksichtigt sowohl die Vorgabe konkreter Leitlinien zur Bestimmung des beizulegenden Zeitwerts von Vermögenswerten und Schulden als auch die Anforderungen an die Offenlegung von bewertungsrelevanten Informationen im Anhang.

Ziel des IASB ist, den Abschlussadressaten über die Rechnungslegung entscheidungsnützliche Informationen zu vermitteln (Vorwort zu den IFRSs.6a). Insbesondere sollen bestehende sowie potenzielle Eigen- sowie Fremdkapitalgeber des berichterstattenden Unternehmens Informationen erhalten, die diesen bei wirtschaftlichen Entscheidungen, d. h. bei Entscheidungen zur Kapitalbereitstellung, nutzen (Rahmenkonzept.OB2). Nach dem Rahmenkonzept der IFRS ist hierfür erforderlich, dass die Informationen die qualitativen Kriterien der Relevanz und der glaubwürdigen Darstellung erfüllen (Rahmenkonzept.QC6-16). Dem Bewertungsmaßstab des beizulegenden Zeitwerts wird im Schrifttum eine für Investoren grundsätzlich entscheidungsrelevantere sowie zeitnähere Informationsvermittlung gegenüber den historischen Anschaffungs- oder Herstellungskosten unterstellt (Baetge und Zülch, 2001, S. 558; Baetge und Lienau, 2005, S. 65), da die Bilanzierung zum beizulegenden Zeitwert stille Reserven aufdeckt und die Transparenz über die Vermögenslage erhöht (Wagenhofer, 2005, S. 571). Im Gegensatz zum Konzept der Anschaffungs- oder Herstellungskosten ist der Wertmaßstab beizulegender Zeitwert indes auf Grund oftmals subjektiver Annahmen bei dessen Ermittlung mit erheblichen Ermessens- und Bewertungsspielräumen behaftet (Wagenhofer, 2005, S. 566; Schruff, 2005, S. 111; Hitz, 2005, S. 1025), wodurch die Verlässlichkeit des Wertmaßstabs beizulegender Zeitwert vielfach eingeschränkt ist (Benston et al., 2003, S. 38-41; Streim et al., 2005, S. 88; Wagenhofer, 2008, S. 320). Folglich ist dem Bewertungsmaßstab beizulegender Zeitwert ein Konflikt zwischen Relevanz und glaubwürdiger Darstellung der Information inhärent (Wagenhofer, 2005, S. 567; Streim et al., 2005, S. 88; Hitz, 2005, S. 1017).

Die Folgebilanzierung des Goodwills regelt der International Accounting Standard (IAS) 36 „Wertminderung von Vermögenswerten". Die aktuelle Version dieses Standards wurde seitens des IASB zeitgleich mit dem IFRS 3 im März 2004 veröffentlicht. Zentraler Bestandteil der Überarbeitung war, dass der Goodwill mindestens einmal jährlich auf Werthaltigkeit zu überprüfen ist („impairment-only approach"). Eine planmäßige Abschreibung war ab diesem Zeitpunkt nicht mehr erlaubt. Der IASB hat mit der Implementierung des impairment-only approaches das Ziel verfolgt, den Adressaten entscheidungsrelevantere Informationen im Gegensatz zu einer planmäßigen Abschreibung zu vermitteln, indem diese Methode den Nutzenverbrauch des Goodwills sachgerechter abbildet.[1] Indes ist eine von Bilanzierenden und Adressaten nachhaltig akzeptierte Methode für die Folgebewertung des Goodwills bislang nicht entwickelt worden. Ersichtlich ist dies z. B. anhand der „dissenting opinion" zum impairment-only approach:

> *"Neither method will achieve the objective of measuring the consumption of goodwill perfectly: accounting for goodwill is one of the most difficult problems in financial reporting, and the difficulty arises from the nature of goodwill" (IFRS 3 (2004).DO12).*

Wesentlicher Kritikpunkt am impairment-only approach ist, dass die Regelungen des IAS 36 für die Werthaltigkeitsprüfung den Bilanzierenden erhebliche Ermessens- und Bewertungsspielräume einräumen und die verwendeten Annahmen von

1 "*The Board reaffirmed the view it reached in developing ED 3 that if a rigorous and operational impairment test could be devised, more useful information would be provided to users of an entity's financial statements under an approach in which goodwill is not amortised, but instead tested for impairment annually or more frequently if events or changes in circumstances indicate that the goodwill might be impaired*" (IFRS 3 (2004).BC142).

den Adressaten sowie dem Wirtschaftsprüfer lediglich eingeschränkt auf Angemessenheit überprüfbar sind (Watts 2003; Ramanna und Watts 2012). Als Konsequenz könnten die über den impairment-only approach generierten Informationen von den Adressaten auf Grund eingeschränkter Glaubwürdigkeit als nicht oder nur wenig entscheidungsnützlich beurteilt werden (Saelzle und Kronner, 2004, S. 160-164).

Zusammenfassend ist festzuhalten, dass die Rechnungslegungsstandards IFRS 3, IFRS 13 und IAS 36 den Bilanzierenden erhebliches Ermessen im Wege der Anwendung erlauben. Für das Ziel des IASB, die Vermittlung entscheidungsnützlicher Informationen, kann dies potenziell sowohl positive als auch, insbesondere auf Grund eingeschränkter glaubwürdiger Darstellung, negative Folgen haben.

Die vorliegende Dissertation basiert auf fünf Manuskripten und fokussiert auf die Bilanzierung des Goodwills nach den Grundsätzen der IFRS. Intention ist es, zunächst in einem Grundlagenteil sowohl vorhandene Ermessensspielräume für die Bilanzierenden im Rahmen der Rechnungslegungsstandards zu illustrieren als auch die resultierenden Herausforderungen für den Wirtschaftsprüfer darzulegen. Weiterführend werden zur Goodwill-Bilanzierung bestehende Lücken in den Rechnungslegungsstandards bzw. im einschlägigen Schrifttum identifiziert und diskutiert. Im Ergebnis soll die vorliegende Dissertation einen Beitrag zur kritischen Würdigung ausgewählter Aspekte der Goodwill-Bilanzierung auf Basis der internationalen Rechnungslegungsstandards leisten und gezielt Lösungsvorschläge und Verbesserungsmöglichkeiten aufzeigen.

Manuskript A „**Fair Value Accounting – The Case of Europe Communication AG**“ zeigt die Ermessensspielräume, welche die Ermittlung beizulegender Zeitwerte nach IFRS 13 den Bilanzierenden eröffnet. Einführend findet eine Erläuterung der Regelungen zur Ermittlung beizulegender Zeitwerte von Vermögenswerten nach den IFRS statt. Die Ermessensspielräume werden bei einer Anwendung der Regelungen anhand verschiedener Beispiele illustriert. Um eine glaubwürdige Darstellung bei der Ermittlung beizulegender Zeitwerte zu gewährleisten, hat der Wirtschaftsprüfer die Aufgabe, die Ermessensentscheidungen der Bilanzierenden auf Angemessenheit zu überprüfen. Vor diesem Hintergrund veranschaulicht Manuskript A neben einer Darlegung der wesentlichen Vorschriften für Wirtschaftsprüfer auch die Vorgehensweise und Möglichkeiten, welche diesen offenstehen, um wesentliche Fehler bei der Beurteilung von beizulegenden Zeitwerten und Werthaltigkeitsprüfungen zu entdecken.

Die den Bilanzierenden eingeräumten Ermessensspielräume bei der Werthaltigkeitsprüfung nach IAS 36 und die inhärente Subjektivität bei der Ermittlung des Wertminderungsbedarfs werden in Manuskript B „**Bleak Weather for Sun-Shine AG – A Case Study of Impairment of Assets**“ erläutert. Der Beitrag veranschaulicht die konzeptionellen Aspekte der Rechnungslegungsvorschriften nach den IFRS sowie US-GAAP und legt die Anreize verschiedener Stakeholder hinsichtlich des Ergebnisses einer Werthaltigkeitsprüfung dar. Weiterführend werden bestehende Möglichkeiten der Bilanzierenden hinsichtlich der Einwirkung auf das Ergebnis dargestellt. Ziel des Manuskripts ist, den Adressaten zu vermitteln, wie die resultierende Bewertungsunsicherheit bei einer Werthaltigkeitsprüfung erkannt werden kann und dass sich hieraus ein Bedarf an fachlicher Urteilsbildung, dem sogenannten „professional judgment“, ergibt.

Manuskript C “**Plausibilisierungsmöglichkeiten einer Kaufpreisallokation nach IFRS 3 – Theoretische Grundlagen und Fallbeispiel**” fokussiert auf die Entscheidungsnützlichkeit beizulegender Zeitwerte und die Bestimmung der sachgerechten Höhe des bei einer Kaufpreisallokation zu ermittelnden Goodwills. Auf Grund der gegebenen Ermessensspielräume bzw. Bewertungsunsicherheit bei der Bestimmung beizulegender Zeitwerte im Rahmen der bilanziellen Abbildung eines Unternehmenserwerbs ist es der Unternehmensführung möglich, die Höhe der Vermögenswerte und somit des auszuweisenden Goodwills zu beeinflussen. Dies könnte die Glaubwürdigkeit der ermittelten Werte beeinträchtigen. Um die Bewertungsunsicherheit zu reduzieren und den Nachweis einer zutreffenden Vermögensdarstellung führen zu können stellt der Beitrag zwei Methoden vor, die eine Plausibilität der Ergebnisse einer Kaufpreisallokation gewährleisten sollen.

Das Manuskript D „**10 Years Impairment-only approach – Stakeholders‘ Perceptions and Researchers‘ Findings**“ umfasst die Erkenntnisse und Schlussfolgerungen aus der Anwendung des impairment-only approaches im Zeitraum von 2004 bis 2014. Anlass der Untersuchung ist der laufende, vom IASB initiierte post-implementation review (PIR) zum IFRS 3. An dem in diesem Zusammenhang durchgeführten Kommentierungsprozess beteiligten sich insgesamt 97 Parteien mit einem Antwortschreiben auf den veröffentlichen „Request for Information“ (RfI). Im Rahmen des PIR ist es unter anderem Intention des IASB, Informationen darüber zu erlangen, ob mit der Implementierung des impairment-only approaches im Jahr 2004 die Vermittlung entscheidungsnützlicher Informationen, insbesondere im Vergleich zur planmäßigen Abschreibung des Goodwills, für die Adressaten erreicht wurde. In diesem Zusammenhang fordert der IASB explizit die Wissenschaft auf, am Standardsetzungsprozess teilzunehmen.[2] Inwiefern der IASB sein Ziel erreichen konnte und mit der Implementierung des impairment-

[2] Vgl. IFRS Research Round-up, welche den Prozess des PIR als seine Möglichkeit hervorhebt, die Wissenschaft in den Standardsetzungsprozess zu integrieren (http://www.ifrs.org/IFRS-Research/Stay-informed/Documents/IFRS-Research-Round-up-April-2014.pdf, letzte Aktualisierung: 5. August 2014).

only approaches in der Tat eine Verbesserung der Entscheidungsnützlichkeit im Wege der bilanziellen Abbildung des Goodwills verbunden ist, wird mittels einer Inhaltsanalyse der Antworten der Kommentierenden sowie einer systematischen Analyse des bestehenden Schrifttums untersucht. Der Beitrag zeigt, dass wissenschaftliche Ergebnisse mehrheitlich eine Erhöhung der Entscheidungsnützlichkeit infolge der Einführung des impairment-only approaches belegen. Dieses positive Ergebnis ist indes nicht unmittelbar auf die Ansicht der Kommentierenden übertragbar. Diese vermitteln insgesamt ein durchaus gemischtes Stimmungsbild hinsichtlich der Entscheidungsnützlichkeit des impairment-only approaches.

Einer der Kritikpunkte am bestehenden Wertminderungstest im Rahmen des PIR bezog sich auf die Behandlung latenter Steuern bei der Werthaltigkeitsprüfung des Goodwills. Manuskript E „**Impairment of Goodwill and Deferred Taxes under IFRS**“ zeigt daher anhand eines typischen Beispielfalls, dass auf Basis der aktuellen Regelungen unter Umständen eine ökonomisch nicht gerechtfertigte Wertminderung des Goodwills bei der Folgebilanzierung mittels des impairment-only approach auszuweisen ist. Im Wege einer normativen Analyse identifiziert dieser Beitrag Inkonsistenzen der Rechnungslegungsstandards IFRS 3, IAS 36 und IAS 12 und diskutiert vier Lösungsmöglichkeiten zur Vermeidung einer nicht sachgerechten Erfassung einer Wertminderung des Goodwills in den Folgeperioden eines Unternehmenserwerbs. Der Ausweis einer ökonomisch nicht gerechtfertigten Wertminderung des Goodwills würde der Zielsetzung des IASB, entscheidungsnützliche Informationen zu generieren, widersprechen.

Die folgende Übersicht fasst das beschriebene kumulative Dissertationsvorhaben überblicksartig zusammen:

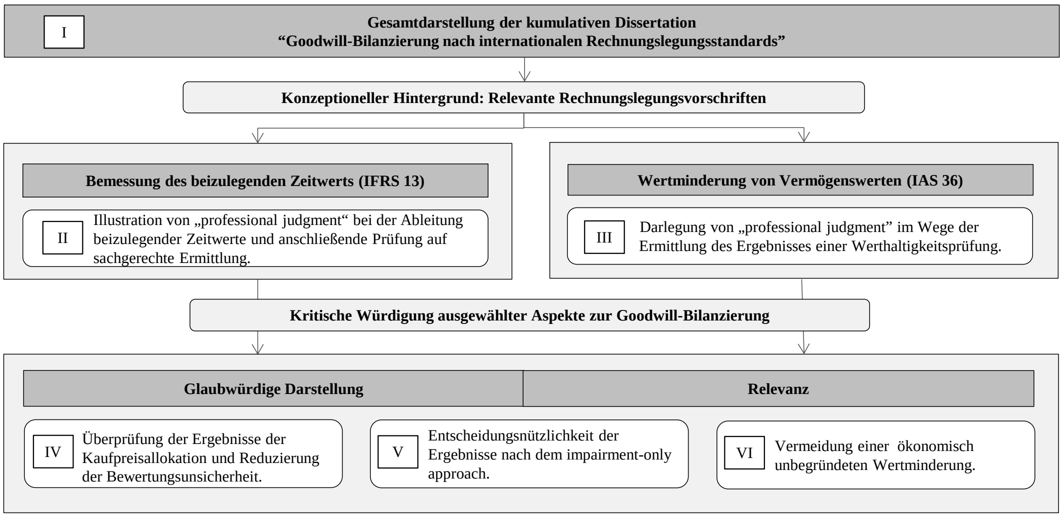


Abbildung 1: Aufbau der Dissertation

2 Übersicht der Manuskripte und Ergebnisse der Dissertation

Das Manuskript A „**Fair Value Accounting – The Case of Europe Communication AG**“ umfasst die Ermittlung sowie Prüfung beizulegender Zeitwerte und Werthaltigkeitsprüfungen. Als methodische Grundlage verwendet dieser Beitrag eine Fallstudie, welche dem Bereich der *Accounting Education* zuzuordnen ist. Die Lernziele der Fallstudie beziehen sich auf eine Kenntnis der technischen Aspekte der Rechnungslegungsvorschriften und Prüfungsstandards sowie die Entwicklung eines Verständnisses für die Ausübung von Ermessensentscheidungen bei der Ermittlung von beizulegenden Zeitwerten. Darüber hinaus vermittelt das Manuskript, wie ein Wirtschaftsprüfer wesentliche Risiken bei der Bilanzierung mit Hilfe von Wesentlichkeitsgrenzen und analytischen Prüfungsmethoden identifiziert. Die Fallstudie hat zum Ziel, den Lesern/Adressaten, die Vorgehensweise und Methoden (wie z. B. alternative Prüfungshandlungen) zu vermitteln, die Wirtschaftsprüfern offenstehen, um den gestiegenen Anforderungen an die Bilanzierung von beizulegenden Zeitwerten und Werthaltigkeitsprüfungen zu begegnen.

Das Manuskript ist zur Einreichung bei der Zeitschrift *Issues in Accounting Education* (ISSN 0001-4826) vorgesehen. Eine Einreichung wird zeitnah nach Fertigstellung der Dissertation angestrebt. Koautor des Manuskripts ist Henning Zülch. Die Entwicklung der Forschungsidee, Konzeption und Aufarbeitung des Themas sowie Abfassung des Manuskripts wurde von den Autoren zu gleichen Teilen durchgeführt.

Manuskript B „**Bleak Weather for Sun-Shine AG – A Case Study of Impairment of Assets**“ veranschaulicht die zugrunde liegenden Regelungen von Werthaltigkeitsprüfungen und ist ebenfalls dem Bereich der *Accounting Education* zuzuordnen. Die Inhalte werden in der Form einer Fallstudie präsentiert. Auf Grund der Komplexität des IAS 36 und der dem Standard inhärenten Ermessensspielräume ist eine ausschließliche Kenntnis der Regelungen nicht ausreichend. Vielmehr ermöglicht die Anwendung auf Basis eines realen Beispielfalls den Adressaten den Gesamtzusammenhang der Regelungen zu erfassen. Die Fallstudie erfüllt die zweite Ebene des *„IFRS educational frameworks*“, welches ein grundsätzliches Verständnis von Ermessensausübung und Schätzungen erfordert. Manuskript B verfolgt über die Anwendung der Regelungen hinaus das überfachliche Lernziel, die analytischen Fähigkeiten der Adressaten und das konzeptionelle Denkvermögen zu verbessern.

Das Manuskript befindet sich derzeit im Begutachtungsprozess der Zeitschrift *Issues in Accounting Education* (ISSN 0001-4826). Koautoren des Manuskripts sind Henning Zülch und Dominic Detzen. Die Entwicklung der Forschungsidee, Konzeption und Aufarbeitung des Themas sowie Abfassung des Manuskripts wurde von den Autoren zu gleichen Teilen durchgeführt.

Manuskript C “**Plausibilisierungsmöglichkeiten einer Kaufpreisallokation nach IFRS 3 – Theoretische Grundlagen und Fallbeispiel**” illustriert Möglichkeiten die Bewertungsunsicherheit zu reduzieren und das Ergebnis der Bewertungen bei der bilanziellen Abbildung von Unternehmenszusammenschlüssen nach IFRS 3 glaubwürdig darzustellen. Die bei einer Kaufpreisallokation im Rahmen des IFRS 3 zu berücksichtigende Zeitwertbewertung soll gemäß Zielsetzung der IFRS entscheidungsnützliche Rechnungslegungsinformationen generieren. Mit der Neubewertung der übernommenen Vermögenswerte und Schulden und der damit verbundenen Abkehr von den bisher bilanzierten Buchwerten sollen Bilanzadressaten möglichst relevante Informationen erhalten. Insbesondere sind immaterielle Vermögenswerte, die das erworbene Unternehmen noch nicht bilanzierte, wie z. B. Markenrechte und Kundenbeziehungen, zu identifizieren und zu bewerten. Die Höhe des Ansatzes dieser immateriellen Vermögenswerte ist hinsichtlich der glaubwürdigen Darstellung zu hinterfragen, da durch die Komplexität des Standards sowie die sich ergebenden Ermessensspielräume die bilanzielle Abbildung eines Unternehmenserwerbs erschwert überprüfbar ist. Da insbesondere das deutschsprachige Schrifttum Plausibilisierungsmöglichkeiten einer Kaufpreisallokation bislang kaum Beachtung schenkt, trägt der Beitrag zur Schließung dieser Lücke bei.

Der Beitrag stellt zwei Methoden vor, mittels derer die Ergebnisse eines Unternehmenserwerbs überprüft werden können. Einerseits dient der Abgleich der gewichteten Kapitalkosten des Unternehmens aus Marktsicht (*weighted average cost of capital*, WACC) mit der internen Verzinsung der Investition (*internal rate of return*, IRR) der Plausibilisierung der erwarteten Zahlungsströme des erworbenen Unternehmens aus Marktperspektive. Andererseits kann über eine Analyse der gewichteten vermögenswertspezifischen Zinssätze (*weighted average return on assets*, WARA) eine weitere Überprüfung erfolgen. In diesem Fall wird der WACC als Verzinsung der Mittelherkunft der erwarteten vermögenswertspezifischen Verzinsung der Mittelverwendung gegenübergestellt. Eine wesentliche Abweichung der untersuchten Zinssätze kann bedeuten, dass die Erwartungen des Erwerbers denen eines typischen Marktteilnehmers und somit dem Grundsatz der Ermittlung beizulegender Zeitwerte nicht entsprechen. Folglich sind Anpassungen der Bewertungsparameter in Betracht zu ziehen. Diese Methoden dienen lediglich zur Plausibilisierung einer Kaufpreisallokation und sollen dem Erwerber sowie seinem Abschlussprüfer helfen, getroffene Annahmen und zugrunde liegende Schätzungen überschlägig zu prüfen. Sie dienen keinesfalls einer eindeutigen Identifikation eines Bewertungsfehlers, welche regelmäßig nicht möglich sein wird. Der Beitrag stellt konkret die Einbindung der Plausibilisierungsphasen (IRR-Analyse und WARA-Analyse) in den bestehenden Prozess der Kaufpreisallokation vor. Ein solcher Prozessablauf trägt systematisch und zeitnah zur Prüfung der Ergebnisse der Kaufpreisallokation bei.

Der Beitrag ist bereits zur Veröffentlichung angenommen und erscheint in der Zeitschrift *Betriebswirtschaftliche Forschung und Praxis* (ISSN 0340-5370). Koautoren des Beitrags sind Henning Zülch und Dominic Detzen. Die Entwicklung der Forschungsidee, Konzeption und Aufarbeitung des Themas sowie Abfassung des Manuskripts wurde von den Autoren zu gleichen Teilen durchgeführt.

Das Manuskript D „**10 Years Imairment-only Approach – Stakeholders‘ Perceptions and Researchers‘ Findings**“ untersucht die Erfahrungen, Auffassungen und wissenschaftlichen Ergebnisse zum impairment-only approach der letzten Dekade. Die Teilnahme von Wissenschaftlern am PIR wurde mehrfach begrüßt, insbesondere Ewert und Wagenhofer (2012) fordern, dass “*academics can, and should, play a significant role in a PIR*”. Der Beitrag folgt diesem Aufruf und analysiert die Auswirkungen der Implementierung des impairment-only approaches für den Goodwill im Jahr 2004 aus zwei Perspektiven. Zum Einen werden mittels der aus den Sozialwissenschaften entlehnten Methode der Inhaltsanalyse die Antworten der Kommentierenden zum RfI durch den IASB untersucht. Zum Anderen werden anhand einer systematischen Analyse des Schrifttums die Ergebnisse der Wissenschaft zu diesem Thema zusammengestellt. Die Ergebnisse der Analysen zeigen, dass die Ansichten der Kommentierenden hinsichtlich der Entscheidungsnützlichkeit der über den impairment-only approach generierten Informationen uneinheitlich sind. Während insbesondere Kommentierende aus Ländern mit einem Britisch-Amerikanischen Rechnungslegungssystem den impairment-only approach befürworten, wird dieser von den Kommentierenden mit einem kontinentaleuropäischen Rechnungslegungshintergrund abgelehnt. Im Gegensatz zum ausgewogenen Verhältnis der Kommentierenden zeigt die Mehrzahl der wissenschaftlichen Untersuchungen, dass sich die Entscheidungsnützlichkeit der Finanzinformationen mit der Implementierung des impairment-only approaches erhöht hat. Einigkeit besteht bei den Kommentierenden indes dahingehend, dass die Regelungen des IAS 36 den Bilanzierenden zahlreiche Ermessensspielräume eröffnen. Wissenschaftliche Studien belegen, dass die Unternehmensführung diese Spielräume oftmals opportunistisch nutzt. Auf Basis der Ergebnisse zu den Antworten der Kommentierenden und den wissenschaftlichen Studien wird dem IASB abschließend empfohlen, die aktuelle Methodik zur Folgebewertung des Goodwills nicht unmittelbar zu verändern. Vielmehr könnten in einer ersten Phase die im PIR identifizierten und einfach zu implementierenden Verbesserungsmöglichkeiten umgesetzt werden. In einer zweiten Phase sollte zusammen mit dem US-amerikanischen Standardsetzer eine ganzheitliche Betrachtung der Folgebewertung des Goodwills erfolgen.

Das Manuskript ist zur Einreichung bei der Zeitschrift *Accounting in Europe* (ISSN 1744-9480) vorgesehen. Eine Einreichung wird zeitnah nach Fertigstellung der Dissertation angestrebt. Koautoren des Beitrags sind Henning Zülch und Torben Teuteberg. Überdies wurde dieser Beitrag im September 2014 bei der PricewaterhouseCoopers AG in Frankfurt am Main und im Oktober 2014 auf dem sechsten Doktorandenseminar Ost an der HHL präsentiert. Die Entwicklung der Forschungsidee, Konzeption und Aufarbeitung des Themas sowie Abfassung des Manuskripts wurde von den Autoren zu gleichen Teilen vorgenommen. Darüber hinaus hat der vorlegende Promovend die Inhaltsanalyse durchgeführt.

Manuskript E „**Impairment of Goodwill and Deferred Taxes under IFRS**“ diskutiert die Effekte passiver latenter Steuern aus einer Kaufpreisallokation auf die Folgebewertung des Goodwills bei der Werthaltigkeitsprüfung nach IAS 36. Auf Basis der Regelung des IAS 12.66 erhöht der Ansatz der passiven latenten Steuern bei der Kaufpreisallokation nach IFRS 3 den Goodwill. Folgewirkung dieser Regelung ist, dass eine ökonomisch nicht gerechtfertigte Wertminderung des Goodwills in der Höhe der aus der Kaufpreisallokation entstandenen passiven latenten Steuern in der logischen Sekunde nach dem Unternehmenserwerb resultiert. Das Schrifttum hat sich vornehmlich mit diesem „*day one effect*“ beschäftigt. Der pragmatische Lösungsvorschlag lautet, den auf Werthaltigkeit zu testenden Buchwert des Goodwills um die angesetzten passiven latenten Steuern zu verringern (PwC, 2013, Paragraph 18.225.9; Ernst & Young, 2014, S. 1439). Der Beitrag verdeutlicht, dass diese Vorgehensweise konzeptionell umstritten ist, da ein Abzug der passiven latenten Steuern vom Buchwert eine Verbindlichkeit nach IAS 36.76(b) voraussetzt. Eine Klarstellung zur Legitimität dieser Vorgehensweise seitens des IASB ist wünschenswert. Weiterhin greift der Beitrag die Implikationen für Folgeperioden auf und beleuchtet diese. In den Folgeperioden eines Unternehmenserwerbs lösen sich die passiven latenten Steuern auf Grund der planmäßigen Abschreibung der Vermögenswerte kontinuierlich auf. Somit verringert sich der Betrag der passiven latenten Steuern, welcher bei der Werthaltigkeitsprüfung des Goodwills in Abzug gebracht werden kann. In der Folge ist unter ceteris paribus-Bedingungen eine ökonomisch nicht gerechtfertigte Wertminderung des Goodwills unausweichlich. Auf Basis dieser Erkenntnis werden im Beitrag vier Lösungsmöglichkeiten der Vermeidung einer ökonomisch nicht gerechtfertigten Wertminderung des Goodwills in den Folgeperioden vorgestellt. Der Beitrag schließt mit der Empfehlung an den IASB, die zwingende Berücksichtigung passiver latenter Steuern bei der Ableitung des Goodwills im Wege eines Unternehmenserwerbs zu überdenken.

Das Manuskript ist bei der Zeitschrift *Australian Accounting Review* (ISSN 1835-2561) eingereicht. Koautoren sind Henning Zülch und Dominic Detzen. Die Entwicklung der Forschungsidee, Konzeption und Aufarbeitung des Themas sowie Abfassung des Manuskripts wurde von den Autoren zu gleichen Teilen vorgenommen.

Die Dissertation trägt zu einer kritischen Würdigung ausgewählter Aspekte der Goodwill-Bilanzierung nach internationalen Rechnungslegungsstandards bei. Insbesondere werden Lücken im Schrifttum bei der Berücksichtigung passiver latenter Steuern im Rahmen einer Werthaltigkeitsprüfung und Methoden zur Vermeidung einer nicht sachgerechten Allokation des Kaufpreises zum Goodwill bei der bilanziellen Abbildung eines Unternehmenserwerbs identifiziert und geschlossen. Weiterhin wurden dem IASB auf Basis der gegenwärtigen Auffassungen der Kommentierenden und wissenschaftlichen Ergebnissen konkrete Vorschläge für eine künftige Überarbeitung der Regelungen von Werthaltigkeitsprüfungen unterbreitet. Überdies gelingt es mittels einer Darlegung und Illustration von Ermessensspielräumen bei der Ermittlung beizulegender Zeitwerte und Werthaltigkeitsprüfungen im Bereich der *Accounting Education* beizutragen.

Die vorgelegte Dissertation umfasst die Berücksichtigung eines weiten Spektrums verschiedener Methoden. Zum Einsatz gelangen die Inhaltsanalyse, die normative Analyse, ein systematischer Überblick des Schrifttums sowie Fallstudien. Abbildung 2 fasst die Ergebnisse der Dissertation abschließend zusammen.

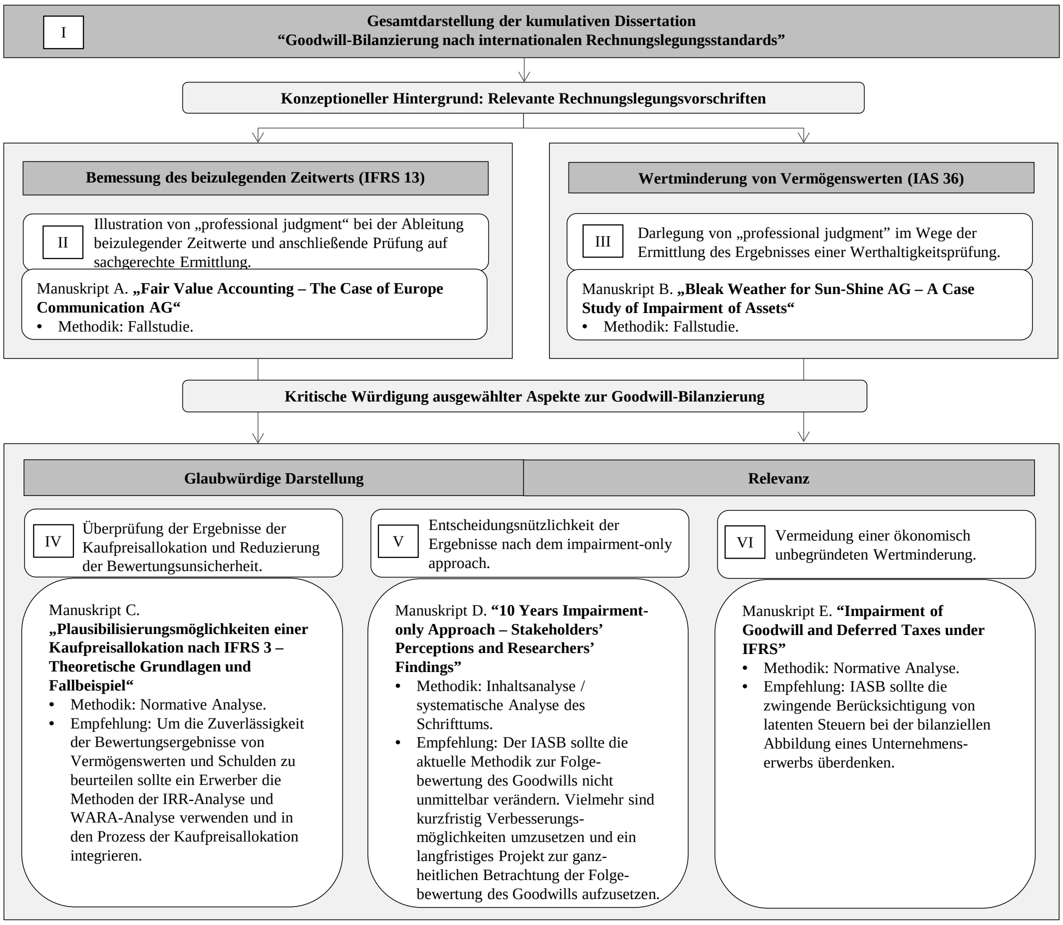


Abbildung 2: Ergebnisse der Dissertation

Literaturverzeichnis

BAETGE, J., LIENAU, A. (2005). Der Gläubigerschutzgedanke im Mixed Fair Value-Modell des IASB, in: Schneider, D. / Rückle, D. / Küpper, H. / Wagner, F. (Hrsg.): *Kritisches zu Rechnungslegung und Unternehmensbesteuerung*, Berlin 2005, 65-86.

BAETGE, J., ZÜLCH, H. (2001). Fair Value-Accounting, in: *Betriebswirtschaftliche Forschung und Praxis*, 53 (6), 543-562.

BENSTON, G., BROMWICH, M., LITAN, R., WAGENHOFER, A. (2003). Following the Money, Washington D. C. 2003.

ERNST & YOUNG. (2014). International GAAP 2014 (9th ed.). *John Wiley & Sons*, Chichester.

EWERT, R., WAGENHOFER, A. (2012). Using Academic Research for the Post-Implementation Review of Accounting Standards: A Note. *Abacus*, 48 (2), 278–291.

HITZ, J. (2005). Fair Value in der IFRS-Rechnungslegung – Konzeption, Inhalt und Zweckmäßigkeit –, in: *Die Wirtschaftsprüfung*, 58 (18), 1013-1027.

PWC. (2013). Manual of Accounting – IFRS 2014. *Bloomsbury Professional*, Haywards Heath.

RAMANNA, K., WATTS, R. (2012). Evidence on the use of unverifiable estimates in required goodwill impairment. *Review of Accounting Studies*. 17(4), 749–780.

SAELZLE, R., KRONNER, M. (2004). Die Informationsfunktion des Jahresabschlusses - dargestellt am sog. "impairment-only-Ansatz". *Die Wirtschaftsprüfung (Sonderheft)*, 154–165.

STREIM, H., BIEKER, M., ESSER, M. (2005). Fair Value Accounting in der IFRS-Rechnungslegung – Eine Zweckmäßigkeitsanalyse, in: Schneider, D. / Rückle, D. / Küpper, H. / Wagner, F.(Hrsg.): *Kritisches zu Rechnungslegung und Unternehmensbesteuerung*, Berlin 2005, 87-109.

SCHRUFF, W. (2005). Die Zeitwertbilanzierung nach IAS/IFRS – ein zukunftsweisendes Konzept oder ein fundamentaler Irrtum?, in: Schneider, D. / Rückle, D. / Küpper, H. / Wagner, F.(Hrsg.): *Kritisches zu Rechnungslegung und Unternehmensbesteuerung*, Berlin 2005, 111-137.

WAGENHOFER, A. (2005). Internationale Rechnungslegungsstandards – IAS/IFRS, 5. Auflage, Frankfurt 2005.

WAGENHOFER, A. (2008). Die Zeit der (Markt-)Bewerter ist gekommen, in: *Zeitschrift für internationale Rechnungslegung*, 3 (7/8), 320-321.

WATTS, R. (2003). Conservatism in accounting part I: Explanations and implications. *Accounting Horizons*, 17 (3), 207–221.

II.

FAIR VALUE ACCOUNTING – THE CASE OF EUROPE COMMUNICATION AG

MANUSCRIPT A.

Tobias Stork genannt Wersborg
Research Associate
HHL Leipzig Graduate School of Management
Chair of Accounting and Auditing
Jahnallee 59, D-04109 Leipzig
email: Tobias.Stork-Wersborg@hhl.de
tel. +49 (0) 3 41 – 9851 676

Prof. Dr. Henning Zülch
Professor of Accounting
HHL Leipzig Graduate School of Management
Chair of Accounting and Auditing
Jahnallee 59, D-04109 Leipzig
email: Henning.Zuelch@hhl.de
tel. +49 (0) 3 41 – 9851 701

II. Fair Value Accounting – The Case of Europe Communication AG

FAIR VALUE ACCOUNTING –
THE CASE OF EUROPE COMMUNICATION AG

Abstract

This case illustrates the application and audit of fair values in accordance with IFRS. In the first part of the case study, students determine fair values for different assets. They apply the fair value hierarchy and learn about the relevant accounting standards which are the basis for fair value determination. Students understand that fair value determination requires professional judgment as well as managerial discretion, giving companies a tool to communicate private information and possibly influence results. The second part of the instructional resource asks students to take on the role of an auditor. This part demonstrates to students that auditing fair values requires professional judgment and raises students' awareness that applied managerial discretion is difficult to be judged by the auditor. Furthermore, students become acquainted with relevant audit standards, materiality aspects and analytical procedures.

Keywords: Fair value, auditing, impairment of assets, IFRS, managerial discretion, professional judgment

1 Manuscript – The Case

1.1 Introduction

At eight o'clock on the evening of 10 January, 20X3, Richard Ross pours himself a glass of his favourite red wine and settles into an armchair to prepare for the coming days. Richard is head of the accounting department at Europe Communication AG[1]. The financial statement of the preceding business year up to 31 December, 20X2 still has to be finalized. Only the valuation of several assets at fair value has to be conducted. As Europe Communication will soon go public on the stock market, the valuation of several assets at fair value is aimed to provide future shareholders with all the information about the financial and profit situation of the company necessary for their investment decisions. After determination of fair values, Richard will have to present the preliminary financial statement to the board of directors at Europe Communication. The day after, there will be a meeting with the auditor. Europe Communication has commissioned a new auditing company with the audit of the financial statement for the preceding business year 20X2.

1.2 Background

At the end of December 20X1, Richard received an unexpected call from a headhunter, who offered him the position as head of the accounting department at Europe Communication. Europe Communication is a business in the telecommunications sector. Founded in Hamburg, in 1921, Europe Communication is a business which is completely held by the Federal Republic of Germany. Since the German state is planning a liberalization of the telecommunications market, Europe Com-

[1] All names, dates and locations are fictitious, as are the "characters" involved in the case.

munication is to initiate a primary offering of its shares on the stock market during the second quarter of 20X3. The Federal government hopes for high proceeds of the new issue to balance parts of the national finances. Europe Communication presents itself to its customers as a total provider of telecommunication services, offering both fixed networks and mobile communication.

- The business with fixed networks comprises all activities of language and data communications via landline and broadband technology. This involves the sale of terminal equipment and other hardware as well as all services to retailers.
- The business with mobile communications offers both private and business customers mobile language and data services. Together with these services, also the equipment and other hardware are sold. Due to the growing popularity of mobile communications, Europe Communication decided five years ago to enter the mobile sector. The aim was to take over a company already established in the market with a broad customer base. Following a protracted due-diligence process, finally Wireless Corp was chosen. A major aspect in favour of Wireless was the network coverage offered by the company at the time. In contrast to its competitors, Wireless had the advantage of covering even rural areas with its network.

Next to the primary business of telecommunications, Europe Communication also owns a commercial office block. The ownership of property which is not in direct relation to the actual business is not unusual for state owned company.

Richard had so far not gained any relevant experiences in the telecommunications sector. The head-hunter explained that despite his lack of actual experience in the sector, he was considered a suitable candidate for the position, since his former employer had highly recommended him. The lack of experience would, however, be reflected in the fact that the contract would be based on a probation period of 18 months. If Richard should demonstrate good work, the contract would be prolonged by another three years. Furthermore, Richard's performance was to be measured by the development of the stock price of Europe Communication after the launch. Correspondingly, Richard would receive further remunerations in the form of shares in Europe Communication. Europe Communication hopes that in this way, both the company and Richard himself will profit from a positive performance of the shares. Richard is thrilled by his new assignment and believes the step into telecommunications to be a good decision. So, finally, he contacts Europe Communication, accepting the position as head of accounting

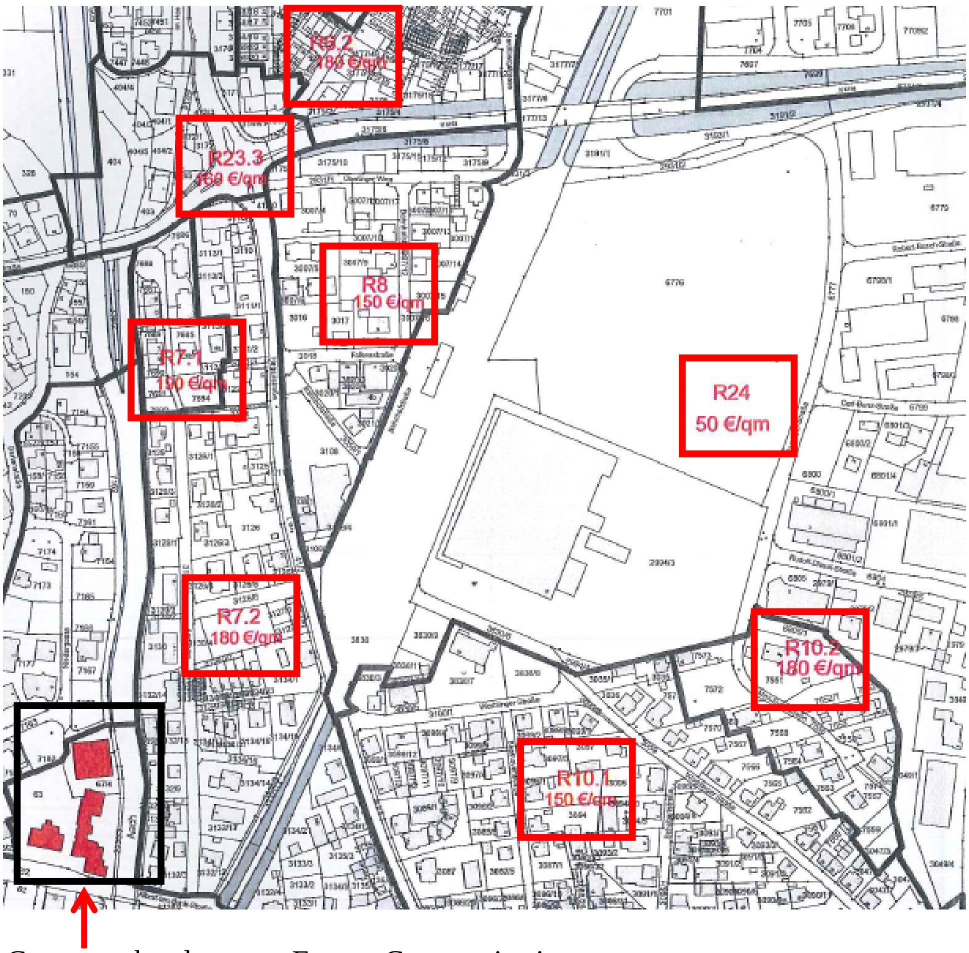
1.3 Part I: Determination of fair values

The next morning Richard enters the corporate headquarters of Europe Communication. The stock launch has been scheduled for 15 February, 20X3. To increase the interest in the stock launch, Richard wants to present the future stockholders with the full potential of Europe Communication, to offer them all the relevant information. He believes that some assets are estimated below their actual value. These hidden reserves are to be presented to the shareholders in a transparent way with the help of fair value accounting. In Richard’s view, the fair value accounting will also be advantageous for the development of the stock price – thus also for his further employment and remuneration. In particular, the corporate property, the office block “Tower” and a share package might carry substantial hidden reserves.

As head of accounting, Richard also has to make sure that covenants negotiated in credit agreements are not violated. At the time of acquiring Wireless, Europe Communication was not able to finance the corporate purchase in cash, but had to emit a bond on the capital market, which was signed by three credit institutes. The interest rate determined in the credit agreements is 5.0%, based mainly on the determined credit worthiness (rating estimation) of Europe Communication. At the time of the credit lending, Europe Communication received the estimation BBB by an independent rating agency. This estimation has not changed since the credit was granted. The credit agreements also considered the covenants. An essential clause states that Europe Communication has to present an equity ratio (measured by the balance sheet value) of at least 30.0%. Should the rate be below 30.0%, the banks have the right to terminate immediately the credit.

1.3.1 Property of corporate headquarters

Richard starts his day with the evaluation of the corporate owned property, where the headquarters are located. This is an ideal office location in Hamburg, not far from several businesses, so that the employees can use their lunch breaks to do some shopping or relax in the Alster-Park close by. The property is capitalized by 31 December, 20X2, with the historical acquisition price of €2.0 million from the year 1954. Richard believes that a value which has not changed during half a century is not really helpful for the shareholders' investment decisions. To estimate the actual value, Richard is using a current standard land value map (as shown in Figure 1), which he received at the land registry office in Hamburg.



Corporate headquarters Europe Communication

Figure 1: Standard land value map

The regularly outlined property comprises an area of 20,000 sq. Richard was also able to look up the land register, where he could not find any notifications that would result in an increase or decrease of his evaluations. All the specifications according to the planning act are observed, and there has never been a known case of ground contamination. The building itself (i.e. the headquarters) is not owned by Europe Communication, but by an international real-estate company, which also built the headquarters at the time. The headquarters are rented on a long-term basis and capitalized as finance-leasing. This was done because after the purchase of Wireless, Europe Communication did not want to invest the remaining financial means in the corporate headquarters.

1.3.2 Office block "Tower"

Once Richard has gathered all the information for evaluating the property, he can move on to the next task, the evaluation of the office block "Tower". Europe Communication owns a commercially let office building, including the property, located at the Jungfernstieg in Hamburg, one of the best and most exclusive business locations in the city. Including the amortized costs, the "Tower" is estimated in the account at €40.0 million by 31 December, 20X2. The offices within the 150 metres high building are currently let to companies in the services and multimedia sectors. Richard has commissioned a specialized real-estate appraisal agency, ImmoExp, with the evaluation of the office block. With this commission he made sure to promise ImmoExp further commissions should he be satisfied with its work. Richard wants to keep all the options open regarding the amount of the fair value estimation. Thus, at first, he asked the two real estate appraisers, Mr. Smith and Mrs. Brown, simply to collect all the information relevant for the evaluation of the "Tower". The experts of ImmoExp should determine a minimal and maximum value for each material valuation parameter, so that Richard might gain an overview of the scope of discretion. The information regarding the Tower collected by ImmoExp is presented in Figure 2.

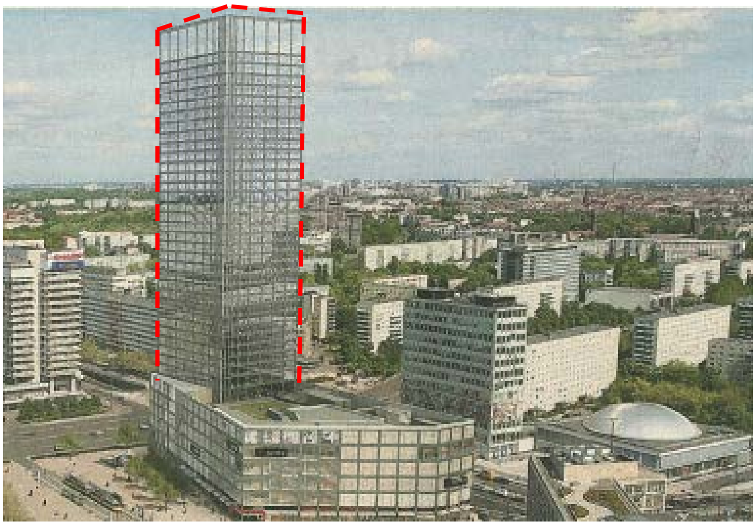
ImmoExp
- Independent Appraiser -

02 December, 20X2

"Tower"

Research summary for discussion purposes with management of Europe Communication:

Description



The 40-floor flat roof building "Tower" was built in 1978 and is in a good condition. There is no need for repairs (apart from continuing maintenance).

The building areas are equipped according to the market standard. The office areas are let based on a rent by sq. The rentable area is evenly distributed across the floors 1 to 40. Each floor has a rentable area of 1,000 sq. The ground floor is viewed as lobby and does not contain any office areas.

Rental Price	In 20X3, the current rental price for office buildings in Hamburg per sq. and month lies between €9.00 and €12.00. During the last 12 months, there has been a significant increase in the rental price. Many rental contracts, however, have been signed long-term. Here, an adjustment to the current rental price level is not possible. The current average rent of Europe Communication thus amounts to €8.50 per sq.
Loss of rent	The loss of rent is dependent on the solvency of the tenants in particular. Loss of rent is due to unrecoverable outstanding rental payments, vacancies, termination of rental agreements and evacuations. In the past, the loss of rent for the Tower amounted to 5.0% of the net rental price. Current reports from the sector estimate the loss of rent at 4.0% to 8.0% of the net rental price.
Administration costs	The rental agreements comprise a clause stating that Europe Communications may not allocate incurring administration costs to the tenants. With their administration costs of only 2.0% of the net rental price, Europe Communication is at the lower end of the scale of companies with low administration costs. Some buildings comparable with the Tower have administration costs of up to 5.0% of the net rental price.
Maintenance costs	Maintenance costs are caused by the ageing process of materials. Buildings such as the Tower usually generate maintenance costs of 1.0% to 2.0% of the net rental price.
Increase rental price	Due to the continually increasing demand for office buildings in Hamburg, the inter-trade organization of real-estate owners expects a further increase in rental prices. The organization's prognosis for office areas foresees an increase of 1.0% to 3.0% of the net rental price.
Planning horizon / inflation	The surplus revenues for the years 20X3 to 20X6 can be estimated fairly accurately. Considering the good condition the Tower is in, it can realistically be expected that the building will be in use for another 50 years. According to the prognosis of the European Central Bank, the inflation rate from 20X7 onwards will be about 2.0%.
Interest	The interest on a risk-free long-term government bond of the Federal Republic of Germany is currently at 2.50%. The property specific risk premium depends on various criteria (e.g. location, furnishing, condition). According to the estimation of ImmoExp, the premium for the Tower should range between 2.0% and 4.0%.
Tax	The net operating income is taxable. The tax rate in Hamburg is at 30.0%.

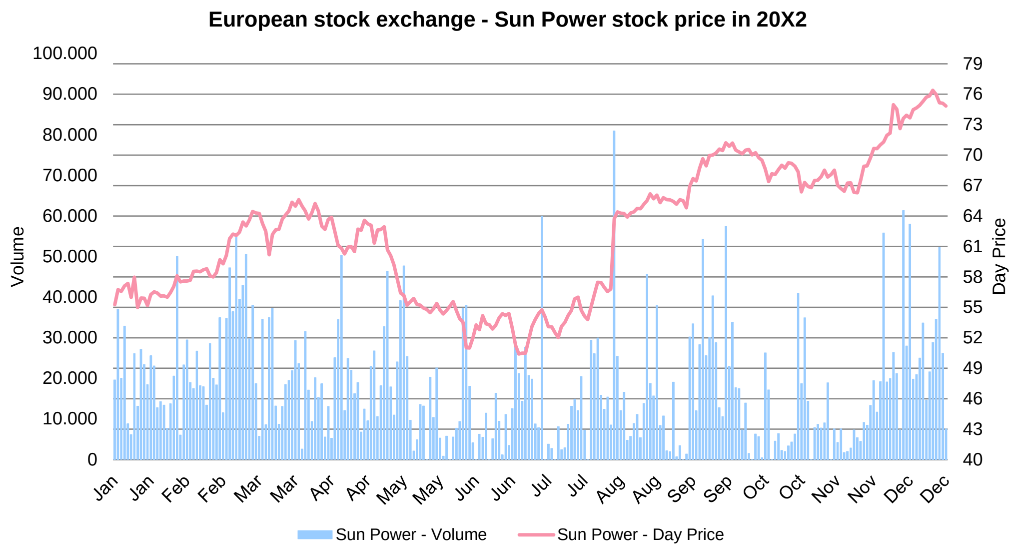
Smith	Brown
Mr. Smith (Real-Estate Expert)	Mrs. Brown (Real-Estate Expert)

Figure 2: Description and valuation inputs "Tower"

After the results of ImmoExp were presented and discussed, Richard decides to estimate the Tower at as high a value as possible. The potential investors should recognize that Europe Communication has substantial non-operating assets. Investors will realize that, by selling the Tower, Europe Communication has the option to make new investments independently at any point in time. This argument has also convinced the CFO of Europe Communication, so that Richard asked ImmoExp to draw up its report accordingly. The report has meanwhile reached Europe Communication and the value calculated by ImmoExp has already been integrated into the financial statement. Now, it is time for Richard's lunch and then he will sit down to evaluate the share package.

1.3.3 Shares in Sun Power Corp.

A couple of years ago, Europe Communication purchased a small package of shares in a business of the solar sector, Sun Power Corp. During its stock launch, Sun Power sold a total of 1 million shares, 30,000 of which are now held by Europe Communication. The shares are offered both on the German and the European stock exchange. The main intention of the purchase was to present a public image of the company as sustainable and environment-friendly. In order to uphold this image, Europe Communication does not intend to sell the shares in the near future. Also, the stock price of the shares has developed positively, so that there is no demand for selling the package. For his evaluation at fair value, Richard has asked the finance department of Europe Communication to email him the development of the stock price during the preceding business year, as shown in Figure 3.



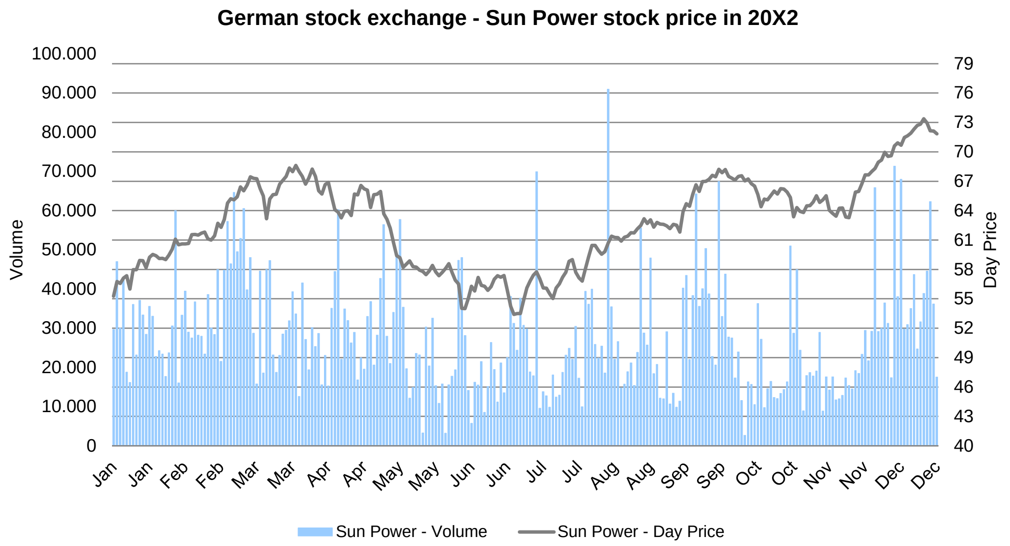


Figure 3: Sun Power – stock price in 20X2

The accounting of the Sun Power shares was based on a stock price of €55.00 as of 31 December, 20X2. Richard estimates the fair value by a simple reading of the stock prices. After a quick cup of coffee, Richard turns to the next task.

1.3.4 Goodwill impairment test

Richard has to assess whether the accounted goodwill of Europe Communication is still recoverable by the effective date of 31 December, 20X2. The goodwill is attributed to the acquisition of Wireless five years ago. At that time, Europe

Communication paid €500 million for the purchase. Due to the acquisition of Wireless, Europe Communication established the new operative segment “mobile services”. The level of this operative segment corresponds to the cash generating unit (CGU) which forms the basis of the goodwill impairment test conducted by Europe Communication.

To conduct the test, Richard has to determine the recoverable amount (higher of fair value less costs of disposal and value in use) and compare this with the carrying amount of the CGU “mobile services”. Richard decides to determine the recoverable amount by looking at multipliers of comparable companies. While Richard himself has only worked in the sector of telecommunications for a few months, he has nevertheless managed with the help of relevant databases to identify several companies comparable with the segment of “mobile services”:

- France Mobile Inc., Paris, France.
- Iberia Communication Ltd., Madrid, Spain.
- Swedish Telecom Inc., Stockholm, Sweden.
- US Mobile Inc., New York, USA.

By the effective date of 28 December, 20X2, the finance department of Europe Communication provides Richard with the relevant data to determine the so-called entity-multipliers (EBIT multiple and EBITDA multiple). To calculate the multiples, Richard compares the “enterprise value” (determined by the sum of market capitalization and net debt) of the comparable companies with their performance indicators (EBIT and EBITDA). This calculation generates the EBIT and EBITDA multiples. Richard finally chooses a 9.2x EBITDA multiple and an 11.8x EBIT multiple and multiplies these with the corresponding performance indicators of “mobile services”. The result shows an enterprise value of €715 million (EBITDA multiple), respectively €647.3 million (EBIT multiple). Richard also thinks it is appropriate to carry out further adjustments of the calculated enterprise value. The prices determined by the stock exchange do not yet consider that a shareholder might gain advantages through the control of a company (the so-called "control premium", e.g. the use of synergy effects in the purchase of higher lots at lower prices). Europe Communication holds 100% of the shares of "mobile services". Thus, Richard estimates an additional 30.0% of the previously determined enterprise value. Richard further considers a solvency discount of 2.5%. This discount is calculated since, in contrast to other peer-group companies, the segment of "mobile services" is not dealt on the stock exchange. There is thus only a limited and more laborious option of selling the shares in "mobile services" than those of the peer-group companies. Finally, Richard has to deduct the costs of disposal, which he simply assesses at 1% of the adjusted enterprise value. As the value of €902.5 million, respectively €817.1 million, as determined by the multiplier evaluation exceeds the carrying amount of the CGU of €614.0 million, Richard is convinced that the goodwill is recoverable. Now, all the necessary evaluations are completed and Richard can draw up the final financial statement as well as the earnings report of the Europe Communication.

1.3.5 Presentation of financial statement to board of directors

The presentation of the final statement to the board of directors takes place in the large conference room of Europe Communication. Apart from presenting the general business development, Richard merely introduces the amount of the operating income and the equity ratio. After Richard's presentation, the chairman of the board is pleased to hear that, according to the presented figures, Europe Communication has completed an extremely successful business year 20X2. Based on these numbers, there should also be a correspondingly high demand for the shares in Europe Communication. The chairman suggests, accordingly, that Richard's contract be prolonged by three years. Richard is exhilarated. There is, however, one last obstacle to tackle: Richard has yet to convince the auditor of his performance. Therefore, Richard sends the preliminary financial statement 20X2 as well as the testified statements of the two previous years (20X0 and 20X1) (as shown in Table 1) to the auditing company Eaton&Partner. Europe Communication also publishes the preliminary unaudited statement for 20X2 on the company website.

Panel A: Balance sheet

Balance Sheet - Europe Communication			
€ in millions	**20X0**	**20X1**	**20X2**
Tangible assets	555.0	578.0	595.0
Land	25.0	25.0	25.0
Buildings	320.0	333.0	338.0
Plant and machinery	210.0	220.0	232.0
Intangible assets	320.0	317.0	314.0
Goodwill	250.0	250.0	250.0
Trademark	70.0	67.0	64.0
Investment property	41.0	40.0	40.0
Financial assets	10.0	10.5	10.5
Non-current assets	**926.0**	**945.5**	**959.5**
Trade receivables	165.0	170.0	185.0
Inventory	52.0	56.0	60.0
Other assets	24.0	27.0	31.0
Cash and cash equivalents	15.0	18.0	22.0
Current assets	**256.0**	**271.0**	**298.0**
Total assets	**1.182.0**	**1.216.5**	**1.257.5**
Trade payables	76.0	82.0	88.0
Other payables	12.0	15.0	18.0
Current liabilities	**88.0**	**97.0**	**106.0**
Bank loans	565.0	580.0	600.0
Long-term liabilities	**565.0**	**580.0**	**600.0**
Equity	**529.0**	**539.5**	**551.5**
Total equity and liabilities	**1.182.0**	**1.216.5**	**1.257.5**

Panel B: Income statement / financial performance

Financial Performance - Europe Communication			
€ in millions	**20X0**	**20X1**	**20X2**
Sales	650.0	645.0	655.0
growth		(0.8%)	1.6%
Cost of goods sold	-400.0	-402.0	-408.0
Gross Profit	**250.0**	**243.0**	**247.0**
GP margin	38.5%	37.7%	37.7%
Other operating income/expenses	0.5	0.2	0.3
Selling Expenses	-108.0	-120.0	-134.0
Other Expenses	-10.0	-10.5	-11.0
EBITDA	**132.5**	**112.7**	**102.3**
Depreciation	-10.00	-10.30	-10.50
Amortization	-3.00	-3.00	-3.00
EBIT	**119.5**	**99.4**	**88.8**
Interest	-28.3	-29.0	-30.0
Taxes	-27.4	-21.1	-17.6
Net income	**63.9**	**49.3**	**41.2**

Table 1: Financial statements Europe Communication

Richard has completed all tasks and is now looking forward to catch at least a couple of hours of sleep.

1.4 Part II: Auditing fair values

1.4.1 Meeting with the auditor

The meeting with the auditor is scheduled for ten o'clock the following morning. This will be the first audit Eaton&Partner conducts for Europe Communication. The board of directors thought that after 20 years cooperating with the audit company Becker&Young, it was time to pass the mandate to a new auditing company. That is why so far, all the parties involved have not met before. The auditor responsible for the audit at Europe Communication will be Peter Rich. In preparation for the meeting with Richard and to make a good first impression, Peter decided to analyze the performance figures of the last three business years. However, due to the short time period between receiving the statements and the scheduled meeting with Richard, Peter was unable to complete his analysis. Peter hopes in the meeting to hear Richard's view on the future economic developments of the telecommunications sector in general and Europe Communication in particular. His other aim is to gain an overview of the most significant business transactions during 20X2 as well as possible particularities concerning the accounting.

1.4.2 Overview market and commercial development

A few minutes to ten, Peter is standing in the lobby of the headquarters of Europe Communication. Richard is already waiting for him and leads him into a small conference room. After exchanging a few pleasantries, Richard immediately gets to the essential points, explaining that the telecommunications sector is currently driven by a discernible cut-throat competition. The future prognosis thus expects a slight decline in the market at the same level of intense competitiveness for the next two years.

- Regarding fixed networks, this means that recently also cable network providers have started to compete with traditional providers like Europe Communication in the sector of landline communications. Richard hence expects only a slight increase in broadband connections provided by Europe Communication. The traditional language revenues through landlines will further decrease, being increasingly replaced by mobile communication.
- Regarding the market for mobile communication, a slight decline in revenues is expected. This is due to the provision of further mobile communication licenses to new actors entering the mobile communications market for the first time, which will lead to another increase in companies within the sector. To compensate this decline in revenues caused by the regulations, Europe Communication hopes for the increasing use of mobile data services. The fast spread of smartphones and tablet-PCs in particular will lead to a growing demand in mobile data and internet services, and thus also to an increase in the revenues in this sector.

Richard explains that in the highly competitive mobile communication sector, Europe Communication can offer a broad network coverage, which has gained the company a good reputation among its customers. The loyal clientele as well as the good network coverage offer, Richard continues to explain, distinct advantages over the competitors. To strengthen further Europe Communication’s competitive power, the following investments are planned for the coming three years:

- Regarding the sector “mobile services”, the next step is to introduce the latest technology LTE (long term evolution). The aim of this investment is to gain higher transmittance rates. With the help of this new technology

LTE, it should be possible in future to offer transmittance rates of up to 100Mbit/s in 100 cities. Within the next 10 years, the LTE transmittance rates are to be made available to 85% of the European population.

- Concerning the landline sector, intensive investments are planned in the area of fibre-optics. Europe Communication has already connected approx. 500,000 households in 40 cities to the fibre-optic network. Based on this technology, a bandwidth of up to 100 MBit/s should be realized. The previous standard UMTS could only offer rates of up to 42 MBit/s.

Peter is impressed by Richard's explanations and the planned investments. Now, he wants to know which significant business transactions were made during the previous business year and also who within the company is responsible for determining the fair values.

1.4.3 Essential business transactions and particularities of accounting

Richard explains that there have been significant alterations in the accounting process, as the methodology of accounting the "Tower" and the property have been changed. Both these assets are now evaluated at fair value. The aim of this new measure was to present investors with a financial statement which would reflect the actual financial standing of Europe Communication. For the estimation of the "Tower", Richard had especially commissioned an expert report, as shown in Figure 4, by the real-estate appraisal agency ImmoExp. Richard tells Peter that the assessment of the Tower was the first commission ImmoExp had carried out for European Communication. In future, ImmoExp is to carry out all property appraisals. ImmoExp receives a remuneration of €40,000 for its work. Richard hands Peter a copy of the main assumptions summarized in the final appraisal report:

ImmoExp
- Independent Appraiser -

15 December, 20X2

Tower
Summary of applied assumptions

- Rental price in 20X3 per sq. and month: 12.00 € (source: inter-trade organization of real-estate owners).
- Loss of rent: 4.0 % of net rental price (source: sector report).
- Administration costs: 2.0 % of net rental price (source: comparison with similar properties).
- Maintenance costs: 1.0 % of net rental price (source: comparison with similar properties).
- Annual increase in rental price: 3.0 % (source: inter-trade organization of real-estate owners).
- Inflation prognosis for the period from 20X7 onwards: approx. 2.0% (source: European Central Bank).
- Interest on risk-free long-term government bonds of the Federal Republic of Germany: 2.50% (source: European Central Bank).
- Estimated property specific risk premium to the discount rate above the risk-free interest rate: 2.0%.
- Tax rate: 30.0%.

Smith | Brown

Mr. Smith (Real-Estate Expert) | Mrs. Brown (Real-Estate Expert)

Figure 4: Applied assumptions

Richard continues to explain that Europe Communication also holds a share package of Sun Power. With less than one percent of the total assets, this is, however, hardly significant for the financial statement. It seems rather more important to

Richard to mention the goodwill. Europe Communication shows a significant goodwill of €250 million in the balance sheet, which is about 18% of total assets. Due to the material impact of the goodwill on the financial statement, Richard himself conducted the goodwill impairment test with the help of multiples. However, Richard had no former experience with the multiple evaluation method. The necessary data were provided by the finance department. In the previous years, the impairment test had already been conducted by the multiple-approach, offering Richard a rich basis for his own calculations. Just the previous evening, Richard had informed the board of directors during his presentation of the financial statement that there was no impairment of the goodwill. To convince Peter of the recoverability of the goodwill, Richard provides him with the calculations (as shown in Table 2):

Panel A: Financial data

Trading Multiples - Peer Group

Company name	Outstanding shares (in m)	Share Price (in €)	Net debt (in m€)	Enterprise Value (EV) (in m€)	EBITDA LTM (in m€)	EBIT LTM (in m€)	Geographical footprint	Business activity	Average EBITDA
US Mobile Inc.	20.0	80.0	50.0	1,650.0	180.0	110.0	USA	Mobile service and fixed	15.0%
Swedish Telecom Inc	5.0	18.0	330.0	420.0	60.0	40.0	Europe	Mobile service	12.5%
Iberia Communication Ltd.	7.0	45.0	450.0	765.0	80.0	65.0	Spain	Mobile service	11.0%
France Mobile Inc.	4.0	56.0	240.0	464.0	95.0	55.0	France	Mobile service	13.0%
Europe Communication (mobile service)	-	-	-	-	78.0	55.0	Europe	Mobile service	9.5%

Panel B: Calculation impairment test

Trading Multiples - Enterprise Valuation

Company name		EV / EBITDA LTM	EV / EBIT LTM
US Mobile Inc.		9.2	15.0
Swedish Telecom Inc		7.0	10.5
Iberia Communication Ltd.		9.6	11.8
France Mobile Inc.		4.9	8.4
Selected Multiple		9.2	11.8
Europe Communication (EBITDA/EBIT)		78.0	55.0
Enterprise Value (before control premium and liquidity premium)		**715.0**	**647.3**
Adjustment control premium	30.0%	214.5	194.2
Adjustment liquidity discount	2.5%	17.9	16.2
Enterprise Value (after control premium and liquidity discount)		**911.6**	**825.3**
Costs of disposal (1% of Enterprise Value)	1.0%	9.1	8.3
Fair value less costs of disposal		902.5	817.1
Carrying amount		614.0	614.0
Impairment loss		**288.5**	**203.1**

Panel C: Balance Sheet

Balance Sheet - mobile services	
€ in million	December 31, 20X2
Tangible assets	260.0
Land	10.0
Buildings	130.0
Plant and machinery	120.0
Intangible assets	285.0
Goodwill	250.0
Trademark	35.0
Non-current assets	**545.0**
Trade receivables	120.0
Inventory	35.0
Other assets	15.0
Cash and cash equivalents	12.0
Current assets	**182.0**
Total assets	**727.0**
Trade payables	65.0
Other payables	12.0
Current liabilities	**77.0**
Bank loans	500.0
Long-term liabilities	**500.0**
Equity	**150.0**
Total equity and liabilities	**727.0**

Panel D: Carrying amount

Calculation carrying amount € in millions	
Tangible assets	260.0
Land	10.0
Buildings	130.0
Plant and machinery	120.0
Intangible assets	285.0
Goodwill	250.0
Trademark	35.0
Carrying amount non-current assets	**545.0**
Trade receivables	90.0
Inventory	35.0
Other assets	15.0
Cash and cash equivalents	12.0
Trade payables	65.0
Other payables	12.0
Carrying amount net working capital	**69.0**
Carrying amount	**614.0**

Table 2: Impairment test

There were no other significant business transactions or particularities in the accounting process during the previous business year. Peter thanks Richard for the detailed explanations and the various documents, which he will examine more closely in his own office at Eaton&Partner.

1.4.4 Audit evaluation Tower

Once back in his own office, Peter starts looking for information on the real-estate appraiser ImmoExp. He has heard mention of the company several times, yet never seen one of its appraisal reports himself. Through colleagues at Eaton&Partner and research on the internet, Peter was able to gather the following information:

"ImmoExp was founded in London in 1890. There are currently more than 68,000 employees working at more than 800 locations all over the world. In Germany alone, ImmoExp is represented at 20 different locations. ImmoExp aims at offering the best standard of property appraisals possible. Quality is assured by the consideration of internationally recognized standards of property appraisal as well as the four-eye principle. If necessary, ImmoExp even consults specialists and experts from related areas. Each property appraisal includes exhaustive market research. ImmoExp guarantees client-oriented work with unconditional neutrality. In the previous year, ImmoExp achieved a turnover of €18 billion."

After gaining a picture of ImmoExp, Peter now has a close look at the appraisal report. Here, Peter notices that ImmoExp estimated a property-specific risk premium to the pre-tax rate of only 2.0%. He considers this addition rather low, and so realizes that the evaluation of the Tower will demand more audit effort than expected. This is particularly due to the input-parameters used by ImmoExp during the evaluation of the Tower.

1.4.5 Audit impairment test

When Peter looks at the clock, he is surprised to find it is already late afternoon. He takes a break, using the opportunity to talk to one of his colleagues at Eaton&Partner experienced in the telecommunications sector. Though Richard's explanations were very clear, Peter still wants to get an expert view on the picture drawn by Richard. During this talk, Peter hears that in the last months there was a discernible trend among especially young customers (30 years and younger) switching from Europe Communication to one of its competitors. Accordingly, about 15% of the customers below 30 years of age terminated their contracts during the last six months. The former strong point of Europe Communication, the ability to offer a broad network coverage, does not seem to serve as a significant market advantage anymore. On the contrary, it is increasingly new services which determine customer behaviour, such as accessing the internet via the mobile phone. Regarding the technology used for this, the main competitors in the sector of "mobile services" have distinct advantages over Europe Communication. The transmittance rates offered by Europe Communication are too low to allow customers to access easily the internet with their mobile phones.

Peter is very surprised by these arguments. Richard never mentioned the loss of clientele. Peter now moves on to the determination of the multipliers. He has, however, to admit to himself that he is an auditor, not an expert in evaluations. So again he turns to another specialist at Eaton&Partner, who gives him the following advice: it is generally possible to conduct additions or deductions during the determination of multipliers. This is especially true for control premiums and liquidity premiums. An exact assessment is hardly possible and always dependent on the actual evaluation situation. Here, professional judgment is needed. Just recently, an investment bank published a representative study which showed that, within the sector of telecommunications, there had never been a transaction in the course of which the liquidity or control premium had exceeded 30.0% of the enterprise value.

Peter is pleased with all the information about telecommunications and the evaluation of multiples he gained from his colleagues. He thinks that he has gathered enough information to begin the audit or first assessment of the valuation of the fair values. During the coming days, Peter wants to analyze systematically the information he gathered. He already has a new meeting scheduled with Richard for the discussion of any remaining questions, which is to take place in two weeks' time, once Richard is back from his holidays.

1.5 Requirements

1.5.1 Part I: Determination of fair values

(1) Please give a short description of which accounting standards according to IFRS are mainly affected by the fair value. Within the framework of the individual standards, is there a consistent concept in use (subsequent valuation, change in profit and loss)? How does IFRS 13 impact the valuation at fair value?

(2) Richard thinks that the valuation of the property and the Tower at fair value provide investors with better insight into the financial situation of Europe Communication. Is the information provided by the fair value indeed more relevant to decision-making?

(3) What interest do creditors have in the financial statement of Europe Communication?

(4) Determine the fair value of the property. Which IFRS standard needs to be applied? Which requirements have to be fulfilled for the determination of fair value? Which level of the fair value hierarchy is affected? Please also point out the corresponding accounting record.

(5) Which arguments could weigh against Richard's idea of applying the fair value model for the Tower?

(6) Please take over the role of ImmoExp and determine the fair value of the Tower (considering the information provided in Figure 2, please calculate both the maximum value – as commissioned by Europe Communication – and the minimal value).[2] Which IFRS standard needs to be applied? Is Richard al-

[2] Please assume that the fair value was not determinable in the past and that the income statement of the previous business year included no depreciation for the Tower.

lowed to use a different valuation method? Which level of the fair value hierarchy is affected? Please also point out the corresponding accounting record.

(7) Please determine the fair value of the share package Sun Power. Which IFRS standard is to be applied and which level of the fair value hierarchy is affected? Please also point out the corresponding accounting record.

(8) Which IFRS standard is applicable to the goodwill impairment test and which value concept does Richard use? Which level of the fair value hierarchy is affected?

(9) Please compile the financial statement of Europe Communication as of 31 December, 20X2 (note: make use of the financial statement provided in Table 1. Regarding the business year 20X2, the figures are before fair value adoption of property, Tower and Sun Power shares).

(10) Did Richard succeed in providing investors with relevant information based on the valuation of different assets at fair value?

1.5.2 Part II: Auditing fair values

(1) Which opportunities and risks result for the auditor from the increasing use of fair value?

(2) Which significant international audit standards should Peter consider in the course of his audit of fair values? Please briefly summarize their contents.

(3) Which valuations at fair value should, in Peter's view, be the most material?[3] What are the implications of this materiality for the following audit of the financial statement?

(4) Why should Peter conduct an analytical assessment? Please conduct an analytical assessment based on an analysis of the operative figures[4] for the years 20X0 to 20X2. Conduct the analysis of the operative figures based on the assumption that no valuation at fair value has been conducted, as well as one including the option of valuation at fair value[5]. Compare the results of both analyses and explain the developments that might have become apparent (note: please use the information provided in Table 1. Regarding the business year 20X2, the figures are before fair value adoption of the assets property, Tower and Sun Power shares).

(5) Please conduct an audit of the fair value of the Tower. During the task, please adhere to the significant international audit standards.[6]

---

[3] Based on the preceding evaluative activities during the risk-assessment of Europe Communication (industry specific and legal conditions, business transactions, company strategy, internal control system), Peter determined an overall materiality of 0.5% of total assets.

[4] Use the following operative figures: Equity ratio, financial leverage, EBIT margin and return on equity.

[5] If, in the first part of the case study, you have not determined any fair values, please assume the following fair values: property €4.0 million; Tower €80.0 million; Sun Power shares €3.0 million.

[6] Please assume that based on his research, Peter has determined the same range of input parameters as those of ImmoExp (Figure 2).

(6) Audit goodwill impairment test:

a. How far is it helpful for Peter's audit to gain insights into the industry of "mobile services" and the organization of the impairment test?
b. Is it correct for Richard to use the multiple method?
c. Is the selection of comparable companies appropriate?
d. Is the determination of the trading multiples appropriate?
e. From an auditor's perspective, please assess how far Richard has made use of discretion (e.g. value of the selected multiples, premiums, discounts) in the determination of the fair value of the CGU "mobile services" with the help of trading multiples. Should Peter make any adjustments concerning the value of the multiples selected by Richard, or the premiums or discounts?
f. Please assess the technical and mathematical accuracy of the determination of the carrying amount.
g. Before Peter makes any audit statements about the recoverability of the goodwill, he decides to gather all the insights gained in his audit so far in a sample accounting. In the course of this sample accounting, Peter wants to revise all the accounting peculiarities he noticed in his audit. The results of this calculation will then serve as a standard of comparison for the recoverability of the goodwill. Please conduct this sample account for Peter. Based on the results, please make a suggestion for the best course of action.

(7) Returning from his holidays, what consequences from the board of directors of Europe Communication and reactions of the investors will Richard face due to Peter's audit results?

2 Case learning objectives and implementation guidance

2.1 Case overview and learning objectives

This case enables students to gain a better understanding of fair value accounting according to IFRS and auditing fair values through a real-world example. Due to the planned initial public offering at the stock market and the objective to provide future shareholders with all relevant information, Europe Communication AG intends to recognize various assets at fair value and no longer at cost. Therefore, students have to perform different valuations at fair value. By doing so, students are reflecting on the consequences of their decisions. After determination of the fair values, students switch to the role of an auditor and assess the valuations according to their appropriateness, the methodological approach, and the conformity with accounting standards.

Accounting courses combine in the rarest of cases the perspectives of different parties involved in preparing and auditing of financial statements. This case study combines the preparation of financial statements with the subsequent audit of several asset valuations. Therefore, the case satisfies the second stage in the IFRS educational framework. Students gain an understanding of the judgments and estimates that accounting inevitably requires. In a first part, students acquire conceptual knowledge regarding fair value accounting by examining relevant accounting standards under IFRS. In addition, they prepare an adjusted balance sheet and reflect on the impact of adjusting historical cost accounting values to fair values which contributes to their appreciation of accounting choice and professional judgment. In the second part, students take the role of the external auditor. Thereby, students become increasingly aware that auditing fair values requires professional judgment. Students learn that managerial discretion is difficult to be challenged by the auditor.

Overall, the learning objectives of this instructional resource are:

1. To understand the technical aspects of accounting provisions and fair value measurement according to IFRS. The objective can be achieved by working on Part I (1). Furthermore, to apply basic valuation techniques in estimating fair values and classify the resulting measure in accordance with the fair value hierarchy (IFRS 13). These themes are evident in Part I (4), (6) and (7).
2. To understand the pros and cons of the application of the fair value model and to assess the opportunities and risks for the auditor resulting from the increasing use of fair value. In addition, to appreciate the impact of fair value adjustments on the financial statement. This learning experience is accomplished by Part I (5), (9) and Part II (1).
3. To appreciate the impact of fair value accounting on capital providers' assessment of the company performance. These aspects give students insights into the intentions and interests of different stakeholders. This learning experience is accomplished by Part I (2), (3) and (10).
4. To learn and apply Generally Accepted Auditing Standards. In addition to identify the risk of material misstatement as well as indicators of unusual developments with the help of materiality thresholds and analytical assessments. Students should work on Part II (2), (3) and (4) to achieve this learning experience.
5. To develop professional skepticism and its use throughout the audit of the Tower and the goodwill impairment test. Furthermore, students will de-

velop an understanding of how auditors evaluate the appropriateness of estimates and work out alternative procedures that could be performed. Finally, students will experience that auditors have methods and tools to limit the exercise of discretion by managers in the course of fair value accounting. These themes are evident in Part II (5), (6) and (7).

2.2 Case development

The case study is mainly based on one of the authors' practical experience following years of audit review and advisory activity in a leading international accounting firm. Students, working on this case study will benefit from these experiences, particularly regarding the application of professional judgment in the course of fair value accounting and the challenges auditors face to ensure that the fair value valuation is appropriate for financial reporting purposes. Most accounting textbooks and standards do not provide students with sufficient information and explanation regarding the challenges accountants and auditors face in practice. Based on this case study, we aim to provide students with a real-life business situation concerning common issues in the field of fair value accounting and auditing.

We believe that the case of “Fair Value Accounting – The Case of Europe Communication AG” is particularly suitable for use by other instructors, because it encourages students to perform both, fair value determination and subsequent auditing. Thereby, students critically reflect on the intentions and aims from different stakeholders’ perspectives. Students will appreciate using our case as they experience the level of managerial discretion applied in the course of valuation and audit. In addition, students acknowledge that the auditor has to ensure that the numbers disclosed in the financial statements reflect a true and fair view.

Several cases have appeared in educational journals which cover different aspects of fair value accounting. In particular, fair value accounting in connection with impairment requirements of goodwill (Frucot, Jordan and Lebow, 2004), intangible assets (Holder-Webb and Kohlbeck, 2006; Kohlbeck, Cohen and Holder-Webb, 2009), and other assets (Cottell, 2010; Gore and Herz, 2010; Dickinson, Kimmel and Warfield, 2011; Needles, 2012; Long, Mertins, Searcy, 2013, Beaudoin and Hughes, 2014) has been considered. The case study by Beaudoin and Hughes (2014) is the only one which emphasizes IFRS, whereas the case study by Kohlbeck, Cohen and Holder-Webb (2009) is unique due to its focus on the audit of fair values. Therefore, the existing instructional resources have a focus on GAPP and not IFRS and scratch audit issues more on the surface than in a profound discussion.

Our case adds to the existing educational resources in the following ways: It explicitly considers the interplay between valuation and auditing of fair values and, thus, illustrates the area of conflict between the exercise of discretion by managers and audit requirements. The case covers IFRS and illustrates in depth the process and difficulties auditors face during the audit of an impairment test. Students become aware of the different perspectives of various stakeholders (shareholders, debt holders, auditors, management) in the course of fair value accounting. Finally, the case considers explicitly the requirements of IFRS 13.

2.3 Implementation guidance

We developed the case study for our class “Advanced International Financial Reporting” a course which is part of the Master of Science program at our school. The class aims to deepen knowledge of international financial reporting. Students passing this course are generally able to handle IFRS and critically reflect on them. The class was taken by a total of twenty four students.

Students were to prepare the report and presentation, after we ”refreshed” the basic knowledge of fair value accounting and auditing to students in the course of a lecture (90 minutes) using a PowerPoint Presentation. From our experience with the case we strongly advice, that students have a basic understanding of auditing and corporate finance before starting to work on the case study. To ensure that students cope with the corporate finance issues in the case, we recommended chapters 7 and 8 of the textbook by Palepu, Healy and Peek (2013) as background reading. However, advanced knowledge of fair value accounting and auditing is not necessary as it is part of the assignment and should be left to students to work this out independently.

During the lecture and at the end, students had the opportunity to ask questions. Afterwards, the case study was distributed and we provided assistance where necessary. Our assistance, however, was limited to advice about where to find background material and discussion of technical challenges (e.g. determination of the fair value of the Tower).

We administered the case as a project for a grade. Thus, we assigned the case in the first class session and a report about the solutions has been handed in by students at the end of the term. This gave students about ten weeks to work on the case study. When we assigned the case, students were to form groups of four to five students. Each group had to write a report with no more than thirty pages. Furthermore, in the last class session, each group had to present their case study to the class. The requirements asked for a twenty minute presentation by the group followed by a ten minute discussion of the overall findings. Discussions were to be led by the group. Regarding fair value measurement (Part I), class discussion focused primarily on student assumptions and how those assumptions affected the fair values and impairment estimates. Since students will most likely use different parameters and come up with different values, instructors can focus the discussion on the results, showing students implications of their professional judgment. This will enhance students' understanding of accounting figures not being 'right' or 'wrong' but rather (in) appropriate. In the course of audit procedures (Part II), students discussed intensively the audit of the goodwill impairment test. Students became eager to reveal all errors of the test and discussed the course of action to be taken.

Grading of the case study covered both presentation (30 %) as well as the report (70 %) and followed pre-defined parameters that consisted of the following: While "Structure and Outline" (15 %) pertained to formal requirements, "Defining the Problem" (20 %) assessed students' understanding and comprehension of the task. Accordingly, we graded the "Approach to Problem-Solving" (30 %) as the conclusiveness of the approach as well as the comprehension of academic fundamentals. Finally, "Results of Problem Solving" (35 %) graded the adequacy of results and the inclusion of own thoughts. The value of the case was approximately 60 % of the total course grade. Overall, the report and presentation revealed that students in fact showed a comprehensive understanding of the rather difficult field of fair value accounting and auditing. The average grade for the case study was slightly better than the overall average for the class.

Students performed all work outside the class, and instructors can anticipate students will spend 35 to 45 hours preparing the case. Instructors need approximately 60 minutes to review student responses to the questions. We believe that a first-time adopter of the case study would require a maximum of eight hours to prepare the case and is able to discuss with students in the course of the presentation. This estimate considers one hour for reading the case and, up to three hours for the technical aspects of fair value accounting and the stakeholder perspectives (Part I) and up to four hours for the audit procedures (Part II). Preparation may vary depending on instructors' individual knowledge.

We believe that the resource can be used at a graduate level in a number of different classes. This case covers several fair value issues with respect to various accounting standards. In addition, students face the challenge to perform an audit for all determined fair values. Therefore, we recommend using this case in financial reporting classes in a Master of Accountancy program, e.g. (Advanced) Financial Accounting, (Advanced) Financial Reporting or a Capstone Seminar. Furthermore, instructors could consider using the case in Auditing classes. From our perspective, the case may be too complex to be used in Intermediate Accounting at an undergraduate level. Therefore, to work on this case, students should have basic knowledge regarding accounting standards according to IFRS, auditing and corporate finance.

Moreover, we believe that MBA classes would be adequate for case usage, too. When employing the case on a MBA level, discussion should focus on the decision-making questions. Hence, instructors should minimize the discussion of the technical aspects regarding fair value accounting and auditing. Instead, instructors should focus and discuss the idea of influencing investors with accounting numbers to increase the demand of shares (Part I). Further discussion in a MBA class could gravitate to the role and difficulties of auditors to ensure that the financial statements show a faithful representation and the consequences of an unqualified audit opinion for both, the stock price and the responsible managers (Part II).

The resource allows instructors much flexibility when distributing and assigning the case. While the first part of the resource addresses the determination of fair values, the second part covers the challenges when auditing fair values. Therefore, instructors may choose a staged approach and, first, distribute the part "Fair value accounting" that ends before the section "Auditing fair values". Consequently, they would need to assign the requirements of Part I only. After students have handed in a report on these issues, instructors can assign the second part of the case which covers the auditing of the fair values just determined by students. In addition, if instructors do not wish to assign the fair value determination, they may skip Part I and focus on the auditing of fair values (Part II). The flexibility of the case provides instructors with the opportunity to use the resource in a way that fits best into their curriculum.

2.4 Student feedback

The case was assigned to students in spring 2014 in the class "Advanced International Financial Reporting". Based on the application we gathered valuable information that prompted us to a slight revision of the case. On the one hand, we reduced complexity and made the case study more compact and on the hand we identified areas of improvement and added more information where necessary.

The effectiveness of the case study was determined by a feedback questionnaire. The questionnaire comprised twelve questions regarding our case and also asked students to estimate the time they spent on the case. Twenty four students completed the questionnaire which was based on a five-point Likert scale, where one indicated “Strongly agree” and five “Strongly disagree”. The results are presented in Table 3.

Statement	Number of Answers					
	Strongly Agree (1)	Agree (2)	Neutral (3)	Disagree (4)	Strongly Disagree (5)	Average
In general, case studies are useful for learning accounting.	15	9				1.38
Prior to the case, my understanding of the accounting and auditing of fair value was weak.	10	13		1		1.67
The case increased my knowledge of the accounting and auditing for fair value.	13	10	1			1.50
The case study provided "real-world" application of what I learned in class.	12	11	1			1.54
The case helped me better understand the type of "real-world" issues faced when accounting and auditing for fair value.	9	15				1.63
The case required me to integrate knowledge of several accounting topics.	11	11	2			1.63
The case study was too difficult.		2	5	9	8	3.96
The case was too easy.			2	11	11	4.38
Overall, the case provided a beneficial learning experience.	13	11				1.46
Overall, the case study served the purpose of this course well.	14	9	1			1.46
I enjoyed working on the case study.	16	7	1			1.38
The case study enhanced my problem-solving skills.	12	11	1			1.54

Table 3: Results of the questionnaire

On average students spent 37.9 hours for case preparation. Student responses were positive and they expressed that the case study provided a beneficial learning experience (1.46) and enhanced their problem-solving skills (1.54). Furthermore, students (strongly) agree, that case studies are useful for learning accounting (1.38). Students appreciated to be confronted with “real-world” application of what they learned in class (1.54) and that the case required integrating knowledge of several accounting topics (1.63). However, we note that regarding the level of difficulty, student responses seem to indicate that the topics presented in the case were somewhat challenging, but not too difficult (3.96) such that they help students understand the issues regarding fair value accounting and auditing.

In addition to the questionnaire, we also asked open questions on more difficult versus easier aspects of the case and for some concluding remarks. Some students mentioned that the case was too long and therefore it was difficult to follow all numbers and assets under consideration. That is why students should be supported with assistance where necessary. By contrast, students appreciated the explanations received and that they relate to the topic without any industry experience. The student feedback supports our view that the case provides a beneficial learning experience for students and increases their knowledge in fair value accounting and auditing. The case can be summarized with the following remark of one student: “Excellent and useful case which helped me to bring various topics together. The case provided me with an on-hand experience to how it is done in the real-world! Thank you!”

3 Teaching Notes

3.1 Case synopsis

The case study introduces the case of Europe Communication AG,[7] a company in the telecommunications sector. Due to the planned initial public offering at the stock market, various assets are no longer recognized on the balance sheet at acquisition cost, but at fair value. Consequently, there are several valuations that have to be conducted. After determination of the fair values, they have to be assessed by the auditor according to their appropriateness, the methodological approach, and the conformity to accounting standards. The case study familiarizes students with the determination of fair values according to IFRS. Students also learn that the determination of fair values results in a broad scope of discretion for companies. To better understand the subject, the students adopt an auditor's perspective. This helps them to recognize the options and limitations governing the auditor's assessment of whether the determination of fair values results in a material error in the financial statement.

3.2 Solutions to the assignments

The following chapters present solutions to the assignments. For each set of questions, we first describe the educational objective of the requirements before we cover the actual solutions. Further instructional comments concerning the questions are written in italics. The Teaching Notes are meant to provide a comprehensive set of solutions and issues to be discussed in class in order to facilitate an easy adoption of the case by a wide range of instructors. The notes are intended to be used by faculty only and are not meant to be distributed to students as they lay

[7] All names, dates, and locations are fictitious, as are the "characters" involved in the case.

out the answers to the assignments. In addition, one of the main learning objectives of the case is that accountants and auditors need to apply judgment in deriving an appropriate solution with respect to the calculation/audit of fair values. Thus, if the Teaching Notes are distributed to students, they might leave the impression that the issues discussed in the case are more clearly resolved than they are.

3.3 Solutions to Part I: Determination of fair values

The first part deals with the valuation and accounting of fair values according to IFRS. Here students learn the relevant IFRS standards which demand a valuation at fair value. In a next step, students are asked to demonstrate with the help of these standards how a valuation at fair value is to be conducted according to IFRS (e.g. the application of the fair value hierarchy). In this context, the change in assessment in terms of the valuation (cost vs. fair value) should not be the primary focus of the discussion. In a final step, students are asked to complete the annual financial statement.

Fair values are increasingly important in accounting according to IFRS. With the first part of this case study, students are thus to understand that the determination of fair values is based on significant discretionary decisions. The increasing use of fair values does, however, not necessarily result in more useful financial statements, as the users of the statements (investors, creditors) might deem the fair value less relevant for their own decision making, due to discretionary decisions.

(1) Please give a short description of which accounting standards according to IFRS are mainly affected by the fair value. Within the framework of the individual standards, is there a consistent concept in use (subsequent valuation,

change in profit and loss)? How does IFRS 13 impact the valuation at fair value?

The following offers an overview of the main areas of IFRS where fair value is applied:

- IAS 16 Property, Plant & Equipment. Revaluation as allowed alternative treatment after recognition (IAS 16.29). Accounting of increases in value as not affecting net income, if they are not allocated to devaluations previously recognized as affecting net income. Profit and loss impact of decrease in value, if there is no revaluation surplus (IAS 16.39 f.).
- IAS 36 Impairment of Assets. Determination of an impairment loss for individual assets or a cash generating unit (CGU) by comparing the carrying amount to the fair value as defined by the higher of value in use and fair value less costs of disposal (IAS 36.18).
- IAS 38 Intangible Assets. Revaluation at fair value as allowed alternative treatment after initial recognition corresponding with IAS 16 (IAS 38.75). Requirement is an active market. Otherwise revaluation at fair value is prohibited (IAS 38.81).
- IAS 39 Financial Instruments. Compulsory determination of fair value for financial instruments held for trading and financial assets available for sale in the course of subsequent valuation. Accounting of all changes in value of financial instruments held for trading as not affecting net income. Changes in the fair value of available for sale securities are not affecting net income. Valuation of hedge activities will be recognized at fair value.
- IAS 40 Investment Property. Valuation of properties and buildings at fair value as an alternative in subsequent valuation (IAS 40.30). Immediate

impact of profit and loss of all fair value changes (IAS 40.35). Otherwise recognition at historical costs and disclosure of fair value in the notes.

- IAS 41 Agriculture. Subsequent valuation for biological assets with effect of fair value changes in profit and loss (IAS 41.12).
- IFRS 3 Business Combinations. Valuation of acquired identifiable assets and assumed liabilities with fair value at acquisition date (IFRS 3.18).
- Further standards related to the fair value: IFRS 4, IFRS 5, IFRS 9, IAS 18, IAS 19.

The explanations above illustrate the different practices within IFRS regarding the subsequent valuation and effect in profit and loss of fair values. *Students should realize that different choices of these options (IAS 16, IAS 38, IAS 40) by accountants might lead to a limited comparability of financial statements.*

With the publication of IFRS 13 in May 2011, the IASB and FASB together adopted an accounting standard which unitized the various valuation principles for the fair value contained in different accounting standards up to that point.

- The fair value defines as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (IFRS 13.9).
- IFRS 13 comprises a unitized valuation standard for the determination of the fair value, containing minimum requirements for the publication of information about assets and liabilities valuated at fair value. Thus IFRS 13 eliminates contradictory definitions and regulations of individual accounting standards.

- IFRS 13 defines how to measure fair value, but not what (i.e. which assets and liabilities) to measure for fair value. This latter is still defined by the individual standards.
- The primary focus of valuation at fair value according to IFRS 13 is on input factors, which are ordered by a three-step hierarchy to stress the market related measurement approach. Ideally, the determination of fair value should be based on observable input parameters, granting an objectively transparent valuation.

(2) Richard thinks that the valuation of the property and the Tower at fair value provide investors with better insight into the financial situation of Europe Communication. Is the information provided by the fair value indeed more relevant to decision-making?

Instructors are encouraged to discuss these questions in detail to give students insights and an understanding of the value relevance of information.

It is assumed that, regarding investors, the fair value is more relevant for decision making and provides more current information than historical costs, as the fair value is able to uncover hidden reserves, thus enabling a more transparent picture of the financial situation. This should help to immediately recognize and communicate all changes in value of the assets to the users (see The Conceptual Framework for Financial Reporting).

The decision usefulness of information, however, does assume that the information is both relevant and reliable. Since fair values relate to predicting future financial position and performance, they hold a significant relevance especially for investors and creditors. On the other hand, in contrast to historical costs, fair values also offer a broad scope of discretion, rendering the determined values less reliable. Furthermore, the measurement of the value is becoming increasingly uncertain, especially if the fair value is determined not by the market price, but has to be measured by comparable objects, valuation models, or by a DCF-approach. If the user are conscious that the fair value recognized in the financial statement is one selected from a broad scope of possible values, or that this could even be the case, then the information contained in the statement might not provide the relevant information for the user's decision making.

The fair value thus carries an inherent conflict between relevance and reliability of information. Finally, it cannot unambiguously be judged whether there really is a greater decision usefulness of fair values for investors, as Richard believes.

(3) What interest do creditors have in the financial statement of Europe Communication?

Investors assume all risks of a company and are generally interested in maximizing their claims. Their income is dependent on the company's success. Debtholders, on the other hand, are more interested if the company is able to provide interest and principal payments. They normally do not assume any operative risks. Consequently, the claims of an investor can be compared to a call-option (see Kothari, Ramanna and Skinner 2010, 257). The strike price of the option corresponds with the face value of debt. The claims of debtholders, in contrast, correspond with a written put option. The increase in the option's value is limited to the face value of debt. If the entity value should be lower than the face value of debt, debtholders experience a loss corresponding to the difference between the face value of debt and the entity value.

The recognition of fair values seems to allow for credit institutes to better judge future developments of a company, and thus to better assess if the company's future cash flows will suffice to manage the interest and principal payments. On the other hand, one can argue that for the valuation of a company's solvency, credit institutes first and foremost need reliable figures, which fair values – mainly based on non-market valuations – usually do not provide. Credit institutes also face the risk that companies will try to recognize revenue in the current year while holding off expenses for future periods. This allows companies to show a high profit for the current period, which is then distributed to investors. This would lower the company's liable equity capital and thus collaterals for creditors. Consequently, credit institutes want companies to have as low a profit as possible and distribute as little as possible to investors accordingly.

(4) Determine the fair value of the property. Which IFRS standard needs to be applied? Which requirements have to be fulfilled for the determination of fair value? Which level of the fair value hierarchy is affected? Please also point out the corresponding accounting record.

The accounting of the property follows the standard set by IAS 16 (Property, Plant and Equipment). According to the allowed alternative method, Europe Communication can recognize the property in the subsequent valuation with the revalued amount corresponding to the fair value at the date of the revaluation. The application of the revaluation model also implies that the property will have to be regularly revalued (IAS 16.31). Richard considers the Hamburg map of the standard ground value in his valuation of the property. Standard ground values are average local ground values. They determine the value of grounds which are essentially of the same usage and value ratio. The standard ground values refer to an area of 1 sq. They reflect the value of an undeveloped property. Since in this case, all the specifications of the planning act were observed and there is no known case of contamination of the grounds, there is no need to adjust the ground values provided by the map. It is thus appropriate to consider a value of €180/sq. With regard to the fair value hierarchy, this is a level 2 input (IFRS 13.B35(g)).

Fair value land	
Standard land value (per square meter in €)	180.0
Size of the lot (in square meter)	20.000.0
€ in millions	
Fair value (revalued amount)	3.6
Carrying amount	2.0
Value increase	1.6

Table 4: Fair value land

Journal entry:

Dr. Land 1.6 Cr. Revaluation reserve (equity) 1.6

(5) Which arguments could weigh against Richard's idea of applying the fair value model for the Tower?

Students should realize that the determination of fair value of the Tower also carries disadvantages. A reflection on these enables students to critically question whether it is useful to determine the fair value before all benefits and risks have been considered.

The following arguments could be made against an accounting of the Tower at fair value:

- The expenditures of commissioning the annual fair value appraisal to ImmoExp.
- The valuation (changes in fair value) is dependent on the appraisal of an external expert (ImmoExp).

- The results are highly volatile due to changes in market parameters. It is generally observable that prices do not continually increase, but also fall. Unpredictable ups and downs might in times of increasing prices result in an artificially high net income for Europe Communication. Investors, however, generally prefer a less erratic profit. They calculate their expected dividend payouts on the annual net income. A volatile net income might lead to uncertainties regarding the expected dividend payout, which in turn might lower the stock price.
- Net income is mixed up with exogenous factors outside of Europe Communication's control (i.e. irregular changes determined by the market, not the operative business).
- A significant lowering in the market price of the Tower could potentially paint a not appropriate picture of Europe Communication's operative profit.
- A comparison of the net income of Europe Communication with that of other companies in the same industry is limited.
- Income statement shows unrealized profits and losses, i.e. Europe Communication shows a profit of €119.1 million in the year of the change (see next question), and profits or losses for the following years are dependent on fair value. These are, however, noncash items.

(6) Please take over the role of ImmoExp and determine the fair value of the Tower (considering the information provided in Figure 2, please calculate both the maximum value – as commissioned by Europe Communication – and the minimal value).[8] Which IFRS standard needs to be applied? Is Richard al-

8 Please assume that the fair value was not determinable in the past and that the income statement of the previous business year included no depreciation for the Tower.

lowed to use a different valuation method? Which level of the fair value hierarchy is affected? Please also point out the corresponding accounting record.

The case is written such that students are required to choose input parameters from a range of possibilities. By doing so, they apply professional judgment and reflect on the consequences of their decisions. In the following, we present calculations based on two scenarios suggested in the implementation guidance: (1) best case and (2) worst case. The two scenarios are calculated as extreme values. The results presented by the students can move in a range between these two scenarios. Since students will most likely choose different input parameters for the calculations, instructors may wish to discuss extensively their solutions for the measurement of fair value. The calculations are to show students the effect of adjustments concerning the input parameters (e.g. discount factor).

Investment properties are properties kept by the owner for the realization of rental payments and/or with the aim of an increase in value. One essential defining criterion is that the proceeds are generated independently of the production or supply of goods or services resp. sale in the ordinary course of business (IAS 40.5). Europe Communication does not intend to sell the Tower. Furthermore, the rental income is independent to the other operative activities of Europe Communication. It thus seems appropriate to recognize the Tower as an investment property according to IAS 40. In former years, the Tower was accounted at its historical costs. Richard now intends to apply the fair value model for the Tower. This is generally possible, since according to IAS 40.30, the subsequent valuation offers the option to recognize the Tower either by the cost model or at its fair value. The option does not reduce the workload, since the fair value of the Tower (if it is determinable) has to be disclosed in the notes in any case (even when applying the cost model) (IAS 40.32 / IAS 40.79(e)).

A voluntary change in accounting policy shall be made only if the change results in financial statements providing reliable and more relevant information (IAS 8 / IAS 40.31). According to IAS 40.31, this is true for the change from the cost model to the fair value model. Regarding IAS 40, Richard accordingly is allowed to switch from the cost model to the valuation at fair value for the Tower. Note: Consider the requirements of IAS 8 when changing the methodology.

Based on the given information, the Tower is to be valuated by a DCF-approach. This approach also dominates in the international practice. The property value determined by DCF-approach corresponds with the present value of all discounted cash flows and possible future sale of the property in the ordinary course of business. To achieve a more objective assessment, entity specific criteria are to be ignored. All input and output line items must comply with the arm's length principle and reflect market conditions at the valuation date. Accordingly, factors deviating from the market expectation should not be considered in the valuation of the Tower (e.g. the below standard rental price of € 8.50). Based on the assessment of the appraiser, the cash flows can reliably be determined up the year 20X6. Thus usually at the end of the planning period (20X6 in this case) a terminal value for the property is estimated. Regarding the expected remaining useful life of 50 years for the Tower, this assumption seems appropriate. The calculation of the present value is based on a market oriented comparable interest rate, as would be achievable for similar investments. The discount rate is comprised of a basis interest rate (e.g. government bond) and a property-specific risk premium. The input factors used by ImmoExp are not directly observable, but have to be adjusted to the property under appraisal. According to the fair value hierarchy, this is an input factor of level 3.

Students should recognize that the determination of the individual parameters is a matter of discretion. The exact figures selected for the rental price (€9.00 – €11.00), loss of rent (4.0% - 8.0%), administration costs (2.0% - 5.0%), maintenance costs (1.0 % - 2.0 %), development in rental price (1.0 % - 3.0 %), and property-specific risk premium (2.0 % - 4.0 %) all impact the fair value. A minimum- and maximum value are to be determined for the Tower (best case and worst case), showing the range of the fair value. Students' results should be somewhere between these figures. We have determined the following fair values:

(1) Best case. Fair value of approx. €159 million.

(2) Worst case. Fair value of approx. €57 million.

The difference between the values of scenario (1) and (2) is approx. €102 million. This figure reflects the amount which is due to the scope of discretion in the determination of the value. The calculations are presented in Appendix A.

Richard wants to demonstrate investors that Europe Communication has substantial non-operating assets. Accordingly, the CFO of Europe Communication and Richard together decided to show the highest possible fair value for the Tower. Our following calculations are thus all based on the best case.

Fair value Tower € in millions	
Fair value	159.1
Asset cost	40.0
Value increase	119.1

Table 5: Fair value Tower

Journal entry:

Dr. Investment property	119.1	Cr. Other operating income	119.1

Based on this valuation, Europe Communication shows a profit increase of €119.1 million. This is, however, a one-time effect, referring only to the business year in which the accounting method was changed. By studying the financial statement, Investors will know that this is an extraordinary profit which will never again be realized in future. On the other hand, the valuation of the Tower at fair value presents the investors with a true and fair view of Europe Communication's true economic situation. This might reduce the uncertainties of investors regarding their expected dividend payouts, so that the valuation of the Tower at fair value might finally result in an increase of the stock price.

(7) Please determine the fair value of the share package Sun Power. Which IFRS standard is to be applied and which level of the fair value hierarchy is affected? Please also point out the corresponding accounting record.

Students are to recognize that the stock price is a Level 1 input parameter. This level in the hierarchy usually leaves companies only a small scope of discretion.

The share package Sun Power is a financial asset according to IAS 39 which is allocated to the category "available for sale". This category considers the recognition of shares which are qualified as not held for trading or held-to-maturity and do not affect net income. A gain or loss shall be recognized in other comprehensive income until the share package is derecognized (IAS 39.55 (b)). If the fair value cannot reliably be determined, the shares are to be recognized at acquisition costs (IAS 39.46c). Europe Communication has not changed the valuation method for the share package. There are no indications that the stock price today or in the past was not determinable or distorted (e.g. because of a low level of liquidity).

Thus, the valuation is again (like in the previous year) to be conducted at fair value. The determination of fair value was based on a stock price of €55.00. During the year 20X2, the stock price has increased significantly (German stock exchange €72.00 and European stock exchange €75.00). Consequently, Europe Communication will ceteris paribus show a higher financial asset "Sun Power Shares" and thus also an equivalently higher equity.

The Sun Power shares are listed on the stock exchange. According to the trading volume, it can be assumed that there is an active market. The stock price can thus be viewed as an input factor of level 1; i.e. the price of an identical asset in an active market directly observable at the measurement date (IFRS 13.76). Listed prices in active markets are deemed the best basis for an estimation of the fair value. Nevertheless, Europe Communication has access to different markets (stock exchanges). The determination of the fair value should refer to the principle market, which has to fulfill the following prerequisites:

- The market with the greatest (trading) volume and level of activity (IFRS 13.A).
- The market usually entered into by Europe Communication (IFRS 13.17).
- At measurement date, Europe Communication has access to the market (IFRS 13.19).

The Sun Power shares are traded at the German and the European stock exchange. Europe Communication has access to both stock exchanges and there is no indication that Europe Communication had no access at the measurement date. The stock exchanges do, however, show a different trading volume. The level of activity is significantly higher in the German stock exchange. Accordingly, this stock exchange has to be viewed as the principle market. Europe Communication thus has to base the measurement of the fair value on the price listed at the German stock exchange (€72.00), even though the European stock exchange is the more advantageous market due to the higher stock price (€75.00). The fair value of the Sun Power shares is derived by multiplying the number of shares (30,000) with the share price (€72.00).

Fair value Sun Power	
Stocks	30.000
Share price (December 31, 20X1) in €	55.00
Fair value (€ in millions) (December 31, 20X1)	1.7
Stocks	30.000
Share price (December 31, 20X2) in €	72.00
Fair value (€ in millions) (December 31, 20X2)	2.2
Value increase (€ in millions)	0.5

Table 6: Fair value Sun Power

Journal entry:

Dr. Financial assets	0.5	Cr. Equity	0.5

(8) Which IFRS standard is applicable to the goodwill impairment test and which value concept does Richard use? Which level of the fair value hierarchy is affected?

In this exercise, it is not the aim that students assess whether Richard's calculations (carrying amount, multiples, discounts and premiums) are correct. Instead, the exercise aims at granting students a general understanding of the impairment test according to IFRS. The discussion of input parameters, scope of discretion, etc. should be part of the second part of this case study (exercise 6), in the context of Peter's audit of the impairment test.

Regarding the annual goodwill impairment test, IAS 36 "Impairment of assets" is to be applied. Impairment for goodwill has to be recorded if the recoverable amount of the CGU is below its carrying amount. IAS 36.6 defines the recoverable amount as the higher value resulting from the comparison of the fair value less costs of disposal with the value in use. The fair value less costs of disposal is based on the fair value, i.e. the market perspective. Value in use, in contrast, is viewed from the company's perspective.

Richard aims at the value concept fair value. With this aim in mind, he first determines the trading multiples. In a next step, he adjusts those multiples by discounts and premiums. According to the fair value hierarchy, the multiples are input parameters of level 2. In order to measure a possible impairment loss, Richard determines the carrying amount of the CGU "mobile services" and compares it to the fair value less costs of disposal. As with €902.5 million or €817.1 million the fair value less costs of disposal is already higher than the carrying amount of €614.0 million. Thus, there is no need for goodwill impairment. According to IAS 36.19, it is not necessary to determine value in use. Consequently, the goodwill impairment test is completed.

(9) Please compile the financial statement of Europe Communication as of 31 December, 20X2 (note: make use of the financial statement provided in Table 1. Regarding the business year 20X2, the figures are before fair value adoption of property, Tower and Sun Power shares).

For the finalization of the financial statement, Richard has yet to include the three accounting records for the property, share package, and Tower into the balance sheet and income statement.

The revaluation of the property at fair value and of the Sun Power shares has to be recognized in equity as not affecting net income (accounting records (1) and (3)). The accounting of the Tower at fair value, however, results in a significant extraordinary income in the income statement (accounting record (2)).

The final financial statement of Europe Communication is shown in Appendix B. The valuation of property, Tower, and Sun Power shares has significantly changed the financial statement of Europe Communication, as shown in Table 7.

	Before fair value adoption	After fair value adoption
Total assets	1,257.5 Million €	1,378.7 Million €
Equity	551.5 Million €	672.7 Million €
Net income	6.9 Million €	124.5 Million €

Table 7: Influence of fair value adoption

(10) Did Richard succeed in providing investors with relevant information based on the valuation of different assets at fair value?

Richard intended to provide future investors of Europe Communication with the most relevant information for their investment decisions, i.e. purchase of shares.

- In the course of the valuation of the Tower at fair value, significant hidden reserves of €119 million were uncovered (range of €57 million to €159 million). Due to the current accounting at historical costs of €40 million, investors gain a better insight into the financial situation of Europe Communication. The input parameters, however, were selected to achieve the highest possible fair value. It may thus be doubtful whether investors view this information as relevant, as the given fair value might be deemed unreasonable. Thus the auditors play an important role, as they have to assess the appropriateness of the valuation. Regarding the profit situation, investors will be able to deduct from Europe Communication's income statement that the valuation of the Tower at fair value in 20X2 yielded an extraordinary income. As this is a one-time effect which will not be achievable in the coming years, it is unlikely that investors will calculate their expected dividend payouts, and the valuation of their shares respectively, based on the net income of the year 20X2 of €124.5 million. It should rather be assumed that investors will ignore this one-time effect and base their calculations on the net income of €6.9 million. Nevertheless, the valuation of the Tower at fair value might reduce investors' uncertainties regarding the amount of expected dividend payouts and thus result in an increase in stock price.

- The hidden reserves uncovered by the valuation of the property are insignificant and will likely not influence investors' investment decisions.
- The Sun Power shares are to be continually measured at fair value. Their amount will, however, not influence investors' investment decisions.

3.4 Solutions to Part II: Auditing fair values

The second part of the case study focuses on the audit of fair values. The publication of decision useful information is one of the basic ideas of IFRS accounting. The more assumptions required in the valuation and the more discretion within the scope of the relevant regulations, the less reliable the determined value will be and the more difficult is its assessment by an auditor. IFRS regulations for fair value measurement show a significant scope of discretion for the accountants. To diminish this scope, it is the role of the auditors to reduce any doubts investors might have in the figures reported in the financial statements. This second chapter thus aims to familiarize students with the main international regulations an auditor can draw on for the assessment of fair value. Students should understand that, while accountants might be granted a large scope of discretion by the IFRS, it is nevertheless possible for an auditor determine where valuations were calculated by the use of discretion and to prevent these accordingly. This case study focuses on the audit of fair value alone. Other audit tasks will not be discussed in this context.

(1) Which opportunities and risks result for the auditor from the increasing use of fair value?

- Opportunity: The dependency on the company is reduced, as the fair value follows an objective valuation, so that the use of company specific data is not necessary. The auditor can simply and effortlessly receive objective market data through independent information providers.
- Opportunity: Valuation at fair value poses a new challenge for companies also. The auditor can support the company in finding novel solutions for this new area of expertise.
- Risk: The valuation at fair value increasingly demands "judgment" (e.g. discount rate, business planning). It is thus necessary to include specialists in the proceedings (e.g. valuation specialists, actuary) (see Jacquemard 2007, 278-279). This changes the role of the auditors themselves. They are increasingly responsible for organizing and coordinating the work of the specialists. As Peter was not able to complete all the tasks of the audit himself, he had to draw on the expertise of his colleagues at Eaton&Partner to gather information on the telecommunications industry and valuation knowhow.

All in all, the risks contained in the increasing application of fair value seem to outweigh the benefits it offers. The complexity and effort involved in the audit of fair values and the inherent error rate increases the auditor's risk of overlooking misstatements in the financial statement.

(2) Which significant international audit standards should Peter consider in the course of his audit of fair values? Please briefly summarize their contents.

The audit Peter has to conduct is primarily regulated by the International Standard on Auditing (ISA) 540 "Auditing Accounting Estimates, Including Fair Value Accounting, Estimates, and Related Disclosure", which deals with the audit of accounting valuations. Peter's aim is to find sufficient audit evidence that the accounting estimates are reasonable and adequate (ISA 540.6). In the course of his audit, Peter might unexpectedly discover assessments and decisions by the management which indicates a possible management bias. Should Peter indeed come across such indicators, he will have to ask himself if the initial risk assessment and the intended responses are still to be considered appropriate (ISA 540.21). By identifying fair value measurements that show a high estimation uncertainty, Peter ensures that the appropriate audit can be planned and carried out accordingly. Based on the insights he gathered, Peter might conclude that the goodwill impairment test contains a higher risk. Richard never mentioned that many young customers were cancelling their contracts. Also, the individual components of the impairment test (multiples, carrying amount, etc.) were primarily determined by Richard, who had no prior experience in these matters. All this significantly increases the risk of error. Peter should consider these facts and adjust the risk assessment and the planned response accordingly, by including various experts at

Eaton&Partner (e.g. valuation, industry) in his audit and by calculating more time effort for his audit of the goodwill impairment test.

The appraisal of material estimates is often based on the information provided by experts of the company to be audited, the so-called "work of management's experts". In this case study, ImmoExp was commissioned to appraise the Tower. Here, Peter will have to adhere to ISA 500 in his audit. He will have to assess the competence, capabilities, and objectivity of ImmoExp (ISA 500.8(a)) and gain an understanding of ImmoExp's work (ISA 500.8(b)). According to this standard, Peter also has to assess whether the work of ImmoExp is appropriate as audit evidence for the relevant assertion (ISA 500.8(c)).

(3) Which valuations at fair value should, in Peter's view, be the most material?[9] What are the implications of this materiality for the following audit of the financial statement?

In applying the materiality principle, Peter has to define himself to what extent he will audit which areas and which extent of misstatements and disregard of regulations he will accept without having to qualify or even deny the audit opinion. Generally, the thresholds on materiality are defined by relative measures. An accounting error is perceived as material if the decision of a shareholder or creditor is influenced. The threshold for individual accounting items can be very low, particularly for those items which are of the most importance for the user (investor, creditor). In general, all errors, even those that are tolerated, have to be analyzed. The analysis has to uncover the reason for each misstatement. If more errors are

[9] Based on the preceding evaluative activities during the risk-assessment of Europe Communication (industry specific and legal conditions, business transactions, company strategy, internal control system), Peter determined an overall materiality of 0.5% of total assets.

uncovered than previously expected, the initially intended materiality will have to be adjusted.

Apart from the materiality threshold concerning the group financial statements as a whole (overall materiality), also the threshold of component misstatements (for example particular classes of account balances) has to be considered. Misstatements that remain below this threshold are, according to ISA 600.21d, clearly trivial for the consolidated financial statement as such. It can be assumed that such components which remain below the threshold will in sum not be material either. Auditors will usually gather all audit deviations (ISA 600.A45) above the threshold and then assess whether individually or aggregate (by comparison with the overall materiality of the group financial statements) they necessitate readjustments in the final audit.

The materiality threshold of 0.5% of total assets results in an overall materiality of €6.1 million. Both the fair value of the property and of Sun Power shares thus remain below this threshold. Accordingly, the valuation of the property and of the Sun Power share will be ignored in the following. The valuation of the Tower and the goodwill impairment, however, are material for the audit of the financial statement and will correspondingly have to be considered in more detail (see calculations Table 8).

Overall materiality	
€ in millions	
Total assets (December, 31 20X1)	1.216.50
Materiality limit	0.5%
Overall materiality	6.1
Fair value (December 31, 20X2)	
Land	3.6
Goodwill	250.0
Sun-Power	2.2
Tower	159.1

Table 8: Calculation overall materiality

(4) Why should Peter conduct an analytical assessment? Please conduct an analytical assessment based on an analysis of the operative figures[10] for the years 20X0 to 20X2. Conduct the analysis of the operative figures based on the assumption that no valuation at fair value has been conducted, as well as one including the option of valuation at fair value[11]. Compare the results of both analyses and explain the developments that might have become apparent (note: please use the information provided in Table 1. Regarding the business year 20X2, the figures are before fair value adoption of the assets property, Tower and Sun Power shares).

Various analyses, e.g. of trends or performance figures, can help the auditor find indicators of unusual developments which might lead to higher risks. Here, the development of specific items is regularly analyzed in comparison with previous years. The discovery of distinct deviations or changes in such an analysis might indicate areas of particular risk, which will in turn become areas of special focus in the audit. By conducting analytical auditing procedures, Peter manages to di-

[10] Use the following operative figures: Equity ratio, financial leverage, EBIT margin, and return on equity.

[11] If in the first part of the case study, you have not determined any fair values, please assume the following fair values: property €4.0 million; Tower €80.0 million; Sun Power shares €3.0 million.

minish the risk of overlooking material misstatements in the financial statement. The following analysis of the performance figures is based on the fair values determined in Part I. The analysis allows for the following conclusions:

Analysis of performance figures before option of fair value accounting was applied (see Table 9):

- The structure of the liabilities side allows for conclusions about the financial situation (financial leverage, equity ratio). The lower the financial leverage, the better the financial situation, as debts, in contrast to equity, will have to be repaid, resulting in payouts. The financial leverage increased from 1.07 in 20X0 to 1.09 in 20X2. Similarly, the equity ratio diminishes over the same period from 44.8% to 43.9%. Europe Communication thus shows a decline of their financial situation over time. The tendency of an reducing equity ratio might in the long run have a negative impact on the covenants agreed upon with the credit institutions. While it seems unlikely that the equity ratio of 30% defined in the credit agreements will be infringed in the near future, Europe Communication should yet keep a close eye on the further development of their equity ratio.
- The analysis of the profit situation is based on profitability figures (EBIT margin and return on equity). The higher these figures, the better the profit situation will be. Here it can be observed, however, that both the EBIT margin and the return on equity diminish over time. This suggests that the profit situation is in decline.

By applying the fair value adoption, the following significant changes in the figures result (see Table 9):

- The equity ratio increases in 20X2 to 48.8%. Similarly, the financial leverage decreases to 0.89. This is due to the disclosure of hidden reserves in the assets property, share package, and Tower. The disclosure of hidden reserves result in an increased equity and thus an improved presentation of the financial situation. Furthermore, Europe Communication can reduce the risk of infringing the covenants.
- The EBIT margin increases to 31.7%. This is caused solely by the fair value valuation of the Tower. It has to be kept in mind that this is a one-time effect. Without the use of the option of fair value valuation, the EBIT margin would be at 13.6% and thus show a negative tendency.
- The return on equity increases from 7.5% to 18.5%. This performance figure will most likely be a lot worse in subsequent years. Again, this is due to the reporting of the high earnings effect generated by the fair value of the Tower.

Financial analysis - Europe Communication (before fair value adoption)			
	20X0	**20X1**	**20X2**
Equity ratio (equity/total assets)	44.8%	44.3%	43.9%
Financial leverage (debt/equity)	1.068	1.075	1.09
EBIT margin (EBIT/sales)	18.4%	15.4%	13.6%
Return on equity (net income/equity)	12.1%	9.1%	7.5%

Financial analysis - Europe Communication (after fair value adoption)			
	20X0	**20X1**	**20X2**
Equity ratio (equity/total assets)	44.8%	44.3%	48.8%
Financial leverage (debt/equity)	1.068	1.075	0.892
EBIT margin (EBIT/sales)	18.4%	15.4%	31.7%
Return on equity (net income/equity)	12.1%	9.1%	18.5%

Table 9: Key financial ratios

The comparison with the previous year is one of the simplest methods of analytical auditing. Peter compares specific items in the financial statement of the business year 20X2 with the respective values of the previous year. In this analysis, Peter notices, that the other operating income of 20X2 shows a significant amount. This step allows Peter to focus on items which show unexpected deviations and thus indicate a higher risk. Peter also notices that the performance figures do not remain constant over time. In business year 20X2, all the figures show a positive trend compared to the previous years. Such deviations can turn Peter's attention to possible misstatements or risks. By analyzing the performance figures, Peter is able to identify key audit areas. In his case, this will obviously be the fair value valuation of the Tower.

(5) Please conduct an audit of the fair value of the Tower. During the task, please adhere to the significant international audit standards.[12]

Students should understand that the particularity in the audit of fair values lies in the fact that there is usually not one single value but a range of plausible values. That is why it is important at this point to judge whether the fair value determined by Europe Communication is within the scope of discretion granted by the accounting standard. It is assumed that the change to the valuation method at fair value was appropriate. Thus this audit task will not be discussed further.

The creation of a financial statement for a company can demand expertise and knowhow in other areas than just accounting or auditing. Thus an company can employ or commission experts from such specific areas to gain the knowledge necessary for the completion of the statement. Richard commissioned ImmoExp for the fair value valuation of the Tower. If Europe Communication does not involve an expert, even though such knowhow is indispensable, it increases the risk of material misstatements in the financial statement. Here Peter has to apply the standard ISA 500 "Using the Work of an Expert". According to ISA 500.6, Peter has to conduct the relevant audit to gain sufficient and appropriate audit evidence that the work delivered by ImmoExp is adequate for the demands of the financial statement. In the course of auditing the fair value, Peter has to at least perform the following two activities:

[12] Please assume that based on his research, Peter has determined the same range of input parameters as those of ImmoExp (Figure 2).

I. Assessment of the competence, capabilities, and objectivity of ImmoExp (ISA 500.8(a)).

Competence refers to the nature and level of the expert knowhow of ImmoExp, while capability refers to the ability of ImmoExp to use this knowhow in the given circumstances. Factors that might influence this capability are, e.g., the geographic location and temporal availability of ImmoExp and their resources. Objectivity refers to the potential impact resulting from a possibly biased use of discretions, conflicts of interest, or the influence of other persons on the professional or business judgment of ImmoExp.

Peter has collected and received a lot of information for assessing competence, capability, and objectivity of ImmoExp:

- While Peter has not had any personal experience with the work of ImmoExp so far, he had opportunity to talk with several colleagues at Eaton&Partner. In these conversations he could gather only positive feedback ("best possible standard", "exhaustive market research", etc.).
- ImmoExp is a global enterprise with 68,000 employees at 800 different locations, 20 of these in Germany alone. Based on this information Peter can assume that ImmoExp has enough personnel to work on the commission. With 20 locations in Germany, Peter can further assume a geographical availability for the valuation of the Tower. Thus ImmoExp shows the capability to fulfill the requirements of the commission.
- ImmoExp considers in their appraisal "internationally recognized standards of property appraisal". The document concerning the valuation of the Tower, which Peter received from Richard, also declares that the two persons mainly responsible for the appraisal, Mr. Smith and Mrs. Brown, are

professional property appraisers. It can thus be assumed that ImmoExp has the competence necessary for the valuation at fair value.

- The objectivity of ImmoExp is potentially affected, as this is a first commission and ImmoExp will be interested in achieving the desired result of a high fair value for Europe Communication to ensure future commissions. On the other hand, ImmoExp does adhere to international standards of property appraisal. Also, it seems unlikely that an company with an annual sales of €18 billion and a remuneration for the appraisal of the Tower of €40,000 would feel dependent on future commissions by Europe Communication. And finally, various methods of quality assurance (such as the four-eye principle) speak against a compromise of objectivity.

All in all, ImmoExp seems to show the appropriate competence, capability, and objectivity to conduct the valuation of the Tower at fair value.

II. Assessment of the appraisal delivered by ImmoExp as suitable audit evidence for auditor’s purposes (ISA 500.8(c))

Students should realize that auditors may not completely limit the scope of discretion for accountants. However, the auditor can uncover significant distortions in the valuation at fair value.

In his assessment whether the appraisal delivered by ImmoExp is suitable as audit evidence, Peter might pose the following questions:

- Is it relevant? Do the considered input data and assumptions impact the fair value of the Tower and are the assumptions material to the audit opinion Peter will have to formulate?
- Is it complete? Is all the relevant input data considered?

- Is it neutral? Is all the data undistorted, respectively, were the most plausible and most likely assumptions selected? In this context, it will be necessary to assess individual cases at the auditor's discretion.
- Is it correct? Is the collection of input data observable or at least transparent? Since the future is uncertain, a value cannot be declaimed as "right" or "wrong". Peter's audit can only aim at ascertaining whether the fair value determined by ImmoExp is "plausible" or "implausible":

Based on these questions, Peter should then ascertain in how far the input data that was used is within an acceptable scope. Here Peter had already noticed that the property-specific risk premium was estimated rather low at 2.0%. In general, a low or medium property-specific risk premium seems justified, as the Tower is in one of the best commercial locations of Hamburg (Jungfernstieg). The building is in good condition and is equipped according to the market standard. Based on these criteria, Peter assumes that a risk premium of 2.5% would be more appropriate. On the other hand, the risk premium estimated by ImmoExp is within the appropriate range of 2.0% to 4.0% and thus within the scope of discretion available to ImmoExp. Consequently, there is no option for Peter to convince ImmoExp of using a (more appropriate) higher property-specific risk premium.

In a second step, Peter now has to assess whether the determination of the individual input data, which each are within the acceptable range (scope of discretion), to get her distort the fair value in the same direction and whether such a distortion has a material impact on the amount disclosed in the financial statement. A comparison of the ranges (Figure 2) with the used input data (Figure 4) should make Peter realize that, while ImmoExp did make sure that all the input data was within the acceptable range, nevertheless each selected input parameter leads to an increase in the fair value of the Tower. Peter can thus not eliminate the possibility of a conscious distortion of the data to show a high fair value. While the input parameters are transparently determined, the resulting fair value is not plausible. Based on these results, the audit of the Tower is far from complete. Peter's response now should be that he communicates his doubts as to the determination of the input parameters to Europe Communication. He should then explain that he believes the fair value of the Tower to be distorted. In consequence, ImmoExp should use input parameters that are less value increasing (e.g. a higher discount rate) to generate a lower fair value. If ImmoExp or Europe Communication should refuse to adjust the input data, Peter has the option to communicate a limited assurance conclusion in the audit report or to qualify the audit opinion.

(6) Audit goodwill impairment test:

a. How far is it helpful for Peter's audit to gain insights into the industry of "mobile services" and the organization of the impairment test?
b. Is it correct for Richard to use the multiple method?
c. Is the selection of comparable companies appropriate?
d. From an auditor's perspective, please assess how far Richard has made use of discretion (e.g. value of the selected multiples, premiums, discounts) in the determination of the fair value of the CGU "mobile services" with the help of trading multiples. Should Peter make any adjustments concerning the value of the multiples selected by Richard, or the premiums or discounts?
e. Please assess the technical and mathematical accuracy of the determination of the carrying amount.

f. Before Peter makes any audit statements about the recoverability of the goodwill, he decides to gather all the insights gained in his audit so far in a sample accounting. In the course of this sample accounting, Peter wants to revise all the accounting peculiarities he noticed in his audit. The results of this calculation will then serve as a standard of comparison for the recoverability of the goodwill. Please conduct this sample account for Peter. Based on the results, please make a suggestion for the best course of action.

The goodwill recognized in the balance sheet makes up a significant part of the assets of Europe Communication. The subsequent valuation (impairment test) is thus very important for the presentation of the financial statement, meaning that the use of discretion poses a great challenge for both Richard (as the accountant) and Peter (as auditor). The audit task Peter will have to conduct refers to the data and assumptions used in the valuation, the mathematical correctness, and the continuity of the method.

(a) An analysis of the industry allows Peter to estimate the risk of impairment for the CGU "mobile services" (see Jacquemard 2007, 290-291). It became apparent that the economic development of the CGU was depicted in different ways. Richard claimed that the economic conditions had not worsened significantly. He furthermore announced that Europe Communication planned large investments to increase the competitiveness of the CGU. Richard did not mention, however, that already their technology was so old that there was a discernible loss of customers. This loss of customers might lead to a decrease in sales and thus an increased risk for the recoverability of the goodwill. Peter got this information from an expert in the industry. This shows that it is very important to critically reflect on all statements made by representatives of the company itself. It is also important to assess the experience and knowhow of the persons responsible for the impairment test. Peter was told that on the one hand, Richard was the one who conducted the impairment test, and on the other hand the board was informed about the results just the previous day. Richard, however, has had no previous experience with the multiple method. This lack of experience results in a higher risk of an inappropriate use of the valuation method. It also seems doubtful that the four-eye principle was adhered to in the course of this important issue. Based on the declining net income of the CGU "mobile services" and the lack of experience Richard has with the multiple method, Peter should conclude that the risk of errors in the impairment test can only be minimized by an extensive audit.

(b) Peter's first audit activity should be to assess the appropriateness of Richard's methodology (ISA 540.8(c)(i)). The choice of method for determining the fair value, which forms the basis for the fair value less costs of disposal, adheres to the three-level fair value hierarchy and is thus dependent on the available data. The multiple method is recognized as a valid valuation approach. Multiples belong to level 2 of the fair value hierarchy. Therefore, from an auditor's perspective, there is no objection to the application of the multiple method. Furthermore, the multiple method was already in use for the impairment test, so that continuity in the method application is given.

(c) Appropriate multiples can be derived from capital market data for exchange-listed comparable companies (Trading Multiples). In principle, it must be noted that generally no two companies are fully comparable and, therefore, the result of a multiple-based valuation can only describe a range of possible entity values (see PwC 2012, paragraph 7.3.2.3).

Critical regarding the valuation of a company with the help of trading multiples is the selection of comparable companies (peer group). The reliance of trading multiples is dependent on the comparability of the companies on which the analysis is based. The higher the degree of correlation between the operations in the peer group and CGU „mobile services" the better the analysis.

Peter should come to the conclusion that the company US Mobile Inc. is not comparable to the CGU "mobile services". On the one hand, US Mobile Inc. is active in the US, and not in Europe like the CGU "mobile services". On the other, US Mobile Inc. offers not only mobile, but also fixed network services (different business activity) and shows a significantly different profitability (US Mobile Inc. 15.0% vs. "mobile services" 9.5%). Consequently, US Mobile Inc. is to be excluded from the peer group. US Mobile Inc. is the company with the highest multiples in the peer group (9.2x EBIT and 15.0x EBITDA). The exclusion of this company results in lower average multiples for the peer group as a whole and accordingly also in a lower fair value of the CGU "mobile services" and a higher impairment risk. Thus, Swedish Telecom Inc, Iberia Communication Ltd. and France Mobile Inc. should be considered as comparable companies.

(d) In his audit of the multiples, Peter should notice that Richard selected the second highest trading multiple both for the EBIT-multiple (x11.8) and for the EBITDA-multiple (x9.2). The selection of the size of the multiple is up to discretion. However, with regard to the current situation of the CGU "mobile services", a selection of the higher multiples does not seem adequate, as there is high competition in the industry, the technology is old-fashioned, and extensive investments are necessary. Also customers are beginning to turn to different service providers.

Based on the current economic situation of the CGU “mobile services”, it thus seems more appropriate to use an average of multiples.

Furthermore, Richard has applied a control premium of 30%. A control premium is an amount that an acquirer is willing to pay over the current market price of the stock to obtain control. The control premium can vary considerably depending on the nature of the business, industry and other market conditions. Accordingly, determining a reasonable control premium will be a matter of judgment (PwC 2012, paragraph 11.8.20; Jacquemard 2007, 292-293). According to the information provided by the valuation expert at Eaton&Partner, it is true that in that sector a maximum control premium of 30% was paid in the past. It can be questioned, however, if Richard’s calculation of the control premium at that amount is also appropriate for the CGU “mobile services”. A well-reasoned and thoroughly documented assessment of the control premium value is necessary based on an adequate amount of supporting evidence (PwC 2012, paragraph 11.8.20). Richard quoted the good network coverage and the loyal customers as arguments for a premium. It has to be kept in mind, however, that the market expert explained that the network coverage of Europe Communication no longer poses a competitive advantage and that, due to low transmittance rates, the CGU “mobile services” is losing especially young customers. Richard’s argument regarding loyal customers seems questionable at least. Based on this information, the calculation of a control premium at the higher end of the scale, i.e. at 30%, seems unjustified. Quite on the contrary, Peter could argue in his audit that based on the loss of customers and dated technology, no hypothetical market participant would even be willing to pay a control premium for the CGU “mobile services”. Based on the careful consideration of all arguments, Peter could use a control premium of 15% for his sample accounting.

The difference in price an acquirer will pay for a liquid asset compared to a comparable illiquid asset is often substantial (see Jacquemard 2007, 293). This difference in price is commonly referred to as the "discount for lack of marketability" (DLOM). The determination of the appropriate DLOM is a controversial topic and a measure of judgment. The determination of the multiples is carried out with companies listed on the stock exchange. The CGU "mobile services", however, is not listed. Due to the lower liquidity of the shares in the CGU "mobile services", it seems appropriate to effect a discount of the fair value. Richard considers a discount of 2.5% of the fair value. According to the study of the investment bank, the liquidity discount could even reach a maximum of 30%. There are no arguments that support the very low discount that Richard applied. It seems appropriate, therefore, that Peter should use a liquidity discount of 15% as first indicator in his sample account.

As a result of this audit, Peter should gain the insight that Europe Communication used all their discretionary options (amount of the selected multiples, control premium, liquidity discount) unilaterally in favor of Europe Communication. A suitable audit activity would thus be to conduct a sample account based on appropriately adjusted parameters. Based on this sample account, Peter should then ascertain whether an impairment of the goodwill is given.

(e) According to IFRS the carrying amount of a CGU includes only those assets that can be attributed directly or allocated on a reasonable and consistent basis to the CGU and will generate future cash inflows used to determine the CGU's recoverable amount. The carrying amount of a CGU does not include the carrying amount of any recognized liability, unless the recoverable amount cannot be determined without this liability (IAS 36.76). “Mobile services” has been identified as a CGU which is why it is assumed that all assets and liabilities of the company are included in the carrying amount. During his technical assessment of the determination of the carrying amount, Peter should not be able to find any mistakes. Richard has correctly allocated all assets and liabilities to the CGU “mobile services” (as can be seen in Table 2 – Panel D of the case study). It is completely appropriate that Richard did not include the bank loan in his determination of the carrying amount, because the bank loan belongs to financing activities (IAS 36.50).

Peter should also consider the mathematical correctness of the calculation. The trade receivables show a value of €120 million. Yet Richard only used a value of €90 million for this position in his determination of the carrying amount. The reason for this mistake is irrelevant. What is important is that Peter notices this mistake during his audit. Furthermore, Richard calculated an incorrect amount for the carrying amount “net working capital”. Based on the figures Richard is using, the net working capital should amount to €75 million. Peter should be able to discover this error as well.

Resulting from the assessment of the technical and mathematical correctness of the determination of the carrying amount, Peter should now conduct his own determination of the carrying amount. This carrying amount should be considered in a sample account by Peter to test for goodwill impairment. Once Peter adjusts the two mathematical mistakes Richard made in his determination of the carrying amount, the net working capital is increased by €36 million. The carrying amount of the CGU “mobile services” thus amounts to €650 million, instead of €614 million, which Richard initially calculated (see Appendix C for a detailed presentation).

(f) The sample account serves Peter to validate his own assessments, based on which he will in turn judge Richard's estimations. The adjustment of the mistakes or critical points discovered in the previous exercises in the course of a sample account results in an impairment loss between €98.0 million (EBITDA-multiple) and €92.7 million (EBIT-multiple). The corresponding calculation can be found in Appendix D. Richard, in contrast, had determined a surplus of €288.5 million (EBITDA-multiple), respectively €203.1 million (EBIT-multiple).

The very different results Richard and Peter generated in their goodwill impairment tests can be explained by various factors:

- Richard used the scope of discretion unilaterally in his selection of parameters for the multiple method. He selected all parameters (amount of multiples, premiums, discounts) to be at the upper end of the possible range of input parameters. The choice of input parameters might be closely related to Richard's remuneration in shares. Richard strives for an increase in the stock price and not for an impairment of goodwill. Consequently, Peter should adjust his audit accordingly and put an even higher emphasis on the goodwill impairment test during his assessment of the financial statement.
- The determination of the carrying amount is based on a few distinct mathematical mistakes. Peter should advice Europe Communication to introduce the four-eye principle, in order to avoid such mistakes in the future.
- It is due to Richard's lack of expertise in the industry that he included a not comparable company, US Mobile Inc., into the peer group. In this con-

text, Richard should next time make use of the industry knowhow at Europe Communication.

However, Richard cannot be accused of „fraud“, as his discretionary decisions are all within the range of possible values and there is no indication of a conscious deception on his part (e.g. in the determination of the carrying amount).

Peter should confront Richard with the result of his sample account. Here it seems advisable to verify the results of the trading multiples with other valuation methodologies. A DCF-approach could, for example, model future scenarios for the development of the CGU “mobile services”. Further, the second value concept of IAS 36 has to be considered. Richard thus needs to determine the value in use before recognizing goodwill impairment.

Consequently, Peter’s audit has discovered that, in contrast to Richard’s initial assumption, the goodwill impairment test is far from complete. Instead, it is likely that the goodwill is not recoverable. Peter will only be able to conduct another audit once Richard has determined the fair value by a DCF-approach and/or the value in use.

(7) Returning from his holidays, what consequences from the board of directors of Europe Communication and reactions of the investors will Richard face due to Peter’s audit results?

Peter’s assessment of the fair value has uncovered that the determined amount for the fair value of the Tower is not plausible. Also, there were several mistakes in the goodwill impairment test, which might lead to material adjustments of the respective accounting positions:

- The Tower was appraised by ImmoExp. However, Richard had asked ImmoExp to determine as high a value as possible for the Tower. Peter's audit has discovered that the fair value measured by ImmoExp seems not plausible, i.e. too high. With regard to the intended initial public offering of the stocks and the requirements of the stock exchange that need to be adhered to, Europe Communication is dependent on an unqualified audit opinion. In order to obtain this, the fair value needs to be adjusted according to Peter's audit results. Richard will have to explain these adjustments to the board of Europe Communication. This in turn might lead the board of directors to question Richard's professional qualification. Considering that the CFO of Europe Communication agreed to a high valuation of the Tower, Richard should not fear any consequences under employment law. Investors might assume that discretionary decisions were used in favor of the board to paint an image of Europe Communication that is better than reality. This might shake the investors' trust in the board of directors and result in increasing doubts as to the figures published by Europe Communication, and thus to a decreasing demand for the shares.
- According to Peter's calculations, the goodwill is not recoverable. Impairment would result in a reduction of the net income of Europe Communication. Another implication of goodwill impairment could be that investors question the current business model of Europe Communication. This could have a negative impact on the demand for shares. Richard is not qualified to carry out the goodwill impairment test alone. On the one hand, he made technical mistakes (e.g. determination of the carrying amount, selection of multiples that are too high), on the other hand he was lacking in industry specific knowhow when selecting the peer group companies.

Richard himself will now have to deliver the news of possible goodwill impairment to the board of directors. The board should for future goodwill impairment tests ensure that it is carried out by persons who have sufficient knowledge for this task. Thus the board should decide to have Richard supported by a team of industry and valuation experts. This would also guarantee the four-eye principle, avoiding further obvious mistakes (miscalculation in the determination of carrying amount).

Appendix A: Determination fair value Tower

Best Case

Calculation fair value - Tower € in millions	**20X3**	**20X4**	**20X5**	**20X6**	**TV** **20X7 ff.**
Gross operating income	**5.8**	**5.9**	**6.1**	**6.3**	**6.5**
Loss of rent	(0.2)	(0.2)	(0.2)	(0.3)	(0.3)
Administration costs	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)
Maintenance costs	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)
Operating expenses	**(0.4)**	**(0.4)**	**(0.4)**	**(0.4)**	**(0.5)**
Net operating income (before tax)	5.4	5.5	5.7	5.9	6.0
Tax expense	(1.6)	(1.7)	(1.7)	(1.8)	(1.8)
Net operating income (after tax)	**3.7**	**3.9**	**4.0**	**4.1**	**168.8**
Midyear discounting period (yrs.)	0.5	1.5	2.5	3.5	
Present value factor	0.978	0.936	0.896	0.857	0.857
Present value of cash flow	3.7	3.6	3.6	3.5	144.7
Discounted net operating income (after tax)	**159.1**				
Fair value	**159.1**				

Worst Case

Calculation fair value - Tower € in millions	**20X3**	**20X4**	**20X5**	**20X6**	**TV** **20X7 ff.**
Gross operating income	**4.3**	**4.4**	**4.4**	**4.5**	**4.5**
Loss of rent	(0.3)	(0.3)	(0.4)	(0.4)	(0.4)
Administration costs	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)
Maintenance costs	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)
Operating expenses	**(0.6)**	**(0.7)**	**(0.7)**	**(0.7)**	**(0.7)**
Net operating income (before tax)	**3.7**	**3.7**	**3.7**	**3.8**	**3.8**
Tax expense	(1.1)	(1.1)	(1.1)	(1.1)	(1.1)
Net operating income (after tax)	**2.6**	**2.6**	**2.6**	**2.6**	**59.4**
Midyear discounting period (yrs.)	0.5	1.5	2.5	3.5	
Present value factor	0.969	0.910	0.854	0.802	0.802
Present value of cash flow	2.5	2.4	2.2	2.1	47.7
Discounted net operating income (after tax)	**56.9**				
Fair value	**56.9**				

Appendix B: Annual statement Europe Communication

Panel A: Balance Sheet

	Balance Sheet - Europe Communication € in millions	20X2
	Tangible assets	596.6
(1)	Land	26.6
	Buildings	338.0
	Plant and machinery	232.0
	Intangible assets	314.0
	Goodwill	250.0
	Trademark	64.0
(2)	Investment property	159.1
(3)	Financial assets	11.0
	Non-current assets	**1,080.7**
	Trade receivables	185.0
	Inventory	60.0
	Other assets	31.0
	Cash and cash equivalents	22.0
	Current assets	**298.0**
	Total assets	**1,378.7**
	Trade payables	88.0
	Other payables	18.0
	Current liabilities	**106.0**
	Bank loans	600.0
	Long-term liabilities	**600.0**
(1)(3)	**Equity**	**672.7**
	Total equity and liabilities	**1,378.7**

Panel B: Income Statement

	Income Statement - Europe Communication € in millions	20X2
	Sales	655.0
	growth	1.6%
	Cost of goods sold	-408.0
	Gross Profit	**247.0**
	GP margin	37.7%
(2)	Other operating income/expenses	119.4
	Selling Expenses	-134
	Other Expenses	-11
	EBITDA	**221.4**
	margin	33.8%
	Depreciation	-10.50
	Amortization	-3.00
	EBIT	**207.9**
	margin	31.7%
	Interest	-30.0
	Taxes	-53.4
	Net income	**124.5**

Appendix C: Carrying amount CGU „mobile services"

Calculation carrying amount € in millions		
	Richard	Peter
Tangible assets	260.0	260.0
Land	10.0	10.0
Buildings	130.0	130.0
Plant and machinery	120.0	120.0
Intangible assets	285.0	285.0
Goodwill	250.0	250.0
Trademark	35.0	35.0
Carrying amount non-current assets	**545.0**	**545.0**
Trade receivables	90.0	120.0
Inventory	35.0	35.0
Other assets	15.0	15.0
Cash and cash equivalents	12.0	12.0
Trade payables	65.0	65.0
Other payables	12.0	12.0
Carrying amount net working capital	**69.0**	**105.0**
Carrying amount	**614.0**	**650.0**

Appendix D: Scenario analysis goodwill impairment test

Trading Multiples - Enterprise Valuation

Company name		**EV / EBITDA LTM**	**EV / EBIT LTM**
Swedish Telecom Inc		7.0	10.5
Iberia Communication Ltd.		9.6	11.8
France Mobile Inc.		4.9	8.4
Selected Multiple (average)		7.1	10.2
Europe Communication (EBITDA/EBIT)		78.0	55.0
Enterprise Value (before control premium / liquidity premium)		**557.6**	**562.9**
Adjustment control premium	15.0%	83.64	84.44
Adjustment liquidity discount	15.0%	83.64	84.44
Enterprise Value (after control premium / liquidity discount)		**557.6**	**562.9**
Costs of disposal (1% of Enterprise Value)	1.0%	5.6	5.6
Fair value less costs of disposal		552.0	557.3
Carrying amount		650.0	650.0
Impairment loss		**98.0**	**92.7**

References

BEAUDOIN, C. A., HUGHES, S. B. (2014). APT, Inc.: An application of impairment testing and fair value estimation using International Financial Reporting Standards. *Issues in Accounting Education*, 29(1), 181-194.

COTTELL, JR., P. G. (2010). Shreffler Stores accounting issues related to consumer receivables, asset impairment, and discontinued operations: A problem-based learning unfolding problem. *Issues in Accounting Education*, 25(4), 775-787.

DICKINSON, V., KIMMEL, P., WARFIELD, T. (2011). Bioscience Company: Accounting for idle plant assets. *Issues in Accounting Education*, 26(1), 155-162.

FRUCOT, V. G., JORDAN, L. G., LEBOW, M. I. (2004). A & B Companies: Impairment of goodwill. *Issues in Accounting Education*, 19(3), 369-376.

GORE, R. A., HERZ, P. J. (2010). Snowy Ridge Ski Resort: Fair value measurement and the impairment of long-term assets. *Issues in Accounting Education*, 25(1), 59-70.

Holder-Webb, L., Kohlbeck, M. (2006). The hole in the doughnut: Accounting for acquired intangibles at Krispy Kreme. *Issues in Accounting Education*, 21(3), 297-312.

JACQUEMARD, R. (2007). Fair value and the auditor, in: Walton, P. (Ed.). *The Routledge Companion to Fair Value and Financial Reporting*, 278-299 (London: Routledge).

KOHLBECK, M. J., COHEN, J. R., HOLDER-WEBB, L. L. (2009). Auditing intangible assets and evaluation fair market value: The case of reacquired franchise rights. *Issues in Accounting Education* 24(1), 45-61.

KOTHARI, S. P., RAMANNA, K., SKINNER, D. J. (2010). Implications for GAAP from an analysis of positive research in accounting. *Journal of Accounting and Economics*, 50(2-3), 246-286.

LONG, J. H., MERTINS, L., SEARCY, D. L. (2013). IRCS: Valuing ethics at the expense of inventory. *Issues in Accounting Education*, 28(1), 153-172.

NEEDLES, JR., B. E. (2012). Graeber Companies, Inc.: Examining impairment of equity-owned investments. *Issues in Accounting Education*, 27(4), 1215-1241.

PALEPU, K. G., HEALY, P. M., PEEK, E. (2013). *Business analysis and valuation: IFRS Edition, Text and cases*. 3rd ed. Andover: Cengage Learning.

PWC (2012). *A Global Guide to Accounting for Business Combinations and Non-controlling Interests – Application of the U.S. GAAP and IFRS Standards*. Available at: http://www.pwc.com/en_US/us/cfodirect/subscriptions/download-global-guide-to-accounting-for-business-combinations-and-noncontrolling-interests -2013-edition.jhtml.

III.

Bleak Weather for Sun-Shine AG – A Case Study of Impairment of Assets

Manuscript B.

Dr. Dominic Detzen
Assistant Professor
Vrije Universiteit Amsterdam
De Boelelaan 1105, 1081 HV Amsterdam
email: d.detzen@vu.nl
tel. +31 (0) 20 – 598 2134

Tobias Stork genannt Wersborg
Research Associate
HHL Leipzig Graduate School of Management
Chair of Accounting and Auditing
Jahnallee 59, D-04109 Leipzig
email: Tobias.Stork-Wersborg@hhl.de
tel. +49 (0) 3 41 – 9851 676

Prof. Dr. Henning Zülch
Professor of Accounting
HHL Leipzig Graduate School of Management
Chair of Accounting and Auditing
Jahnallee 59, D-04109 Leipzig
email: Henning.Zuelch@hhl.de
tel. +49 (0) 3 41 – 9851 701

This manuscript is accepted for publication in Issues in Accounting Education (ISSN 0001-4826). For copyright reasons, pages 114-188 were excluded from this version of my dissertation.

IV.

Plausibilisierungsmöglichkeiten einer Kaufpreisallokation nach IFRS 3 – Theoretische Grundlagen und Fallbeispiel

Manuskript C.

Prof. Dr. Henning Zülch
Professor of Accounting
HHL Leipzig Graduate School of Management
Chair of Accounting and Auditing
Jahnallee 59, D-04109 Leipzig
email: Henning.Zuelch@hhl.de
tel. +49 (0) 3 41 – 9851 701

Tobias Stork genannt Wersborg
Research Associate
HHL Leipzig Graduate School of Management
Chair of Accounting and Auditing
Jahnallee 59, D-04109 Leipzig
email: Tobias.Stork-Wersborg@hhl.de
tel. +49 (0) 3 41 – 9851 676

Dr. Dominic Detzen
Assistant Professor
Vrije Universiteit Amsterdam
De Boelelaan 1105, 1081 HV Amsterdam
email: d.detzen@vu.nl
tel. +31 (0) 20 – 598 2134

Der Beitrag ist zur Veröffentlichung angenommen und erscheint in der Zeitschrift *Betriebswirtschaftliche Forschung und Praxis* (ISSN 0340-5370). Die Seiten 190 bis 232 dieser Dissertationsschrift wurden zur Wahrung des Copyrights aus dieser Online-Version entfernt.

V.

10 YEARS IMPAIRMENT-ONLY APPROACH – STAKEHOLDERS' PERCEPTIONS AND RESEARCHERS' FINDINGS

MANUSCRIPT D.

Tobias Stork genannt Wersborg
Research Associate
HHL Leipzig Graduate School of Management
Chair of Accounting and Auditing
Jahnallee 59, D-04109 Leipzig
email: Tobias.Stork-Wersborg@hhl.de
tel. +49 (0) 3 41 – 9851 676

Torben Teuteberg
Research Associate
HHL Leipzig Graduate School of Management
Chair of Accounting and Auditing
Jahnallee 59, D-04109 Leipzig
email: Torben.Teuteberg@hhl.de
tel. +49 (0) 3 41 – 9851 701 656

Prof. Dr. Henning Zülch
Professor of Accounting
HHL Leipzig Graduate School of Management
Chair of Accounting and Auditing
Jahnallee 59, D-04109 Leipzig
email: Henning.Zuelch@hhl.de
tel. +49 (0) 3 41 – 9851 701

V. 10 Years Impairment-only Approach – Stakeholders' Perceptions and Researchers' Findings

10 Years Impairment-only Approach – Stakeholders' Perceptions and Researchers' Findings

Abstract

The IASB emphasizes the demand for academic research in the standard setting process. We aim to contribute to the current PIR on IFRS 3 *Business Combinations*. In particular, we evaluate the impact of the introduction of the impairment-only approach for goodwill accounting in 2004 from two perspectives. Firstly, we analyze the comment letters submitted by stakeholders in response to the Request for Information (RfI) during the PIR. Secondly, we systematically review related academic literature. The analysis of comment letters sheds light on the advantages and disadvantages of the goodwill impairment test perceived by interested stakeholders. Our findings show that stakeholders' views about the usefulness of the information provided by the impairment test are mixed, while they share widespread concerns of discretion involved in the tests. Academic research tends to support the assumption that the impairment-only approach increases the usefulness of financial reporting. However, the concerns expressed about subjectivity and managerial discretion are confirmed by a number of empirical studies. In this dilemma, we advise the IASB not to withdraw the current concept immediately, but rather recommend some short-term measures to address areas of improvement identified in the PIR. In the long-term, we need a larger project – reasonably in cooperation with the FASB – in which the subsequent treatment of goodwill is holistically reviewed.

Keywords: Post-Implementation Review, Business Combinations, Goodwill, Impairment, IFRS 3, IAS 36

1 Introduction

> *"No one can afford to be dogmatic about the treatment of goodwill. So many excellent authorities disagree absolutely as to the treatment of goodwill that it would seem as if almost any of the methods discussed would be justifiable"* (Gilman, 1916).

The subsequent treatment of goodwill acquired in a business combination has long been one of the most intensely debated accounting issues. A variety of methods, including charging the residual directly to the acquirer's equity or amortization with and without a limit to goodwill's useful life, has been discussed and applied in several jurisdictions as well as internationally. The current stage has been entered into in the early 21st century, when the two most important accounting systems, US GAAP and IFRS[1], moved to the impairment-only approach, i.e. to non-amortization with annual and trigger-based impairment tests.

Following the US Financial Accounting Standards Board (FASB), the International Accounting Standards Board (IASB) abolished the amortization of goodwill in the first stage of its business combinations project in 2004. Ten years later, the IASB is conducting its Post-Implementation Review (PIR) on IFRS 3 *Business Combinations*, the result of the two phases of the project on business combinations that were completed in 2004 and 2008, respectively. Since a PIR is intended to assess the effects of the new accounting provisions on the financial reporting community and "must consider the issues that were important or contentious during the development of the publication" (IFRS Foundation, 2013, par. 6.55), it is

[1] Unless specifically addressed, we generally use the term IFRS (International Financial Reporting Standards) in this paper when referring to both, accounting standards approved by the IASB or its predecessor, the IASC. Standards originally issued by the latter are called International Accounting Standards (IAS).

consequential that IASB Chairman Hans Hoogervorst explicitly already called for a reconsideration of the accounting for goodwill in 2012.[2]

As part of the PIR on IFRS 3, the IASB issued a formal Request for Information (RfI)[3] encouraging the different stakeholders within the IFRS community to express their views on a range of topics. One of the issues explicitly addressed was the usefulness of the impairment-only approach for subsequent goodwill accounting and the related challenges and implementation experiences. Although the preceding PIR on the respective US GAAP standard, FASB Statement No. 141 (revised 2007) *Business Combinations* (Statement 141R), did not explicitly consider the subsequent accounting for goodwill, the FASB recently began to reconsider the issue, too. Having at first allowed private companies to amortize goodwill, the FASB subsequently started a project on *Accounting for Goodwill for Public Business Entities and Not-for-Profits.* However, further activities have been postponed until the findings of the PIR on IFRS 3 are issued by the IASB.[4]

In recent publications as well as in the context of the IFRS Research Centre, the IASB nowadays emphasizes the need for academic research in the standard setting process. Having reviewed academic literature during the PIR on IFRS 8 *Operating Segments* which started in 2012, the IASB is convinced that a review of relat-

2 In his speech on "The imprecise world of accounting" at the International Association for Accounting Education & Research (IAAER) conference in Amsterdam on June 20, 2012, Hans Hoogervorst stated: "The acquired goodwill is subsequently subject to an annual impairment test. In practice, these impairment tests do not always seem to be done with sufficient rigour. Often, share prices reflect the impairment before the company records it on the balance sheet. In other words, the impairment test comes too late. All in all, it might be a good idea if we took another look at goodwill in the context of the post-implementation review of IFRS 3 Business Combinations." The speech can be accessed on http://www.ifrs.org/Alerts/Conference/Pages/HH-speech-Amsterdam-June-2012.aspx (last retrieved: August 5, 2014).

3 RfIs are defined as "formal requests by the IASB for information or feedback on a matter related to technical projects or broader consultations" (IFRS Foundation, 2013, par. 4.15).

4 For information on the FASB project which is aimed at reducing cost and complexity of subsequent goodwill accounting for public business entities and not-for-profit entities see FASB (2014).

ed research forms "an essential part of the PIR process."[5] Accordingly, the *Due Process Handbook* explicitly refers to academic research as a source of potential supplementary information or evidence in addition to the comments received in response to the formal RfI in the PIR (IFRS Foundation, 2013, par. 6.60). In a similar vein, Ewert and Wagenhofer (2012) argue strongly "that academics can, and should, play a significant role in a PIR." Pointing out that an *ex post* assessment of the consequences of new standards on financial reporting quality is a core competency of accounting scholars, they further emphasize that a PIR should be conducted by an institution independently from the standard setter in order to avoid self-evaluation problems. Besides their independence from standard setting, the reliability of academics' results due to rigorous methods as well as their being more neutral regarding possible outcomes of the research are advantages which make them able to make a valuable contribution to a PIR (Ewert and Wagenhofer, 2012).[6]

According to the effective *Due Process Handbook* as of February 2013, the IASB is required to conduct a PIR of new standards or major amendments itself (IFRS Foundation, 2013, par. 6.52).[7] With this paper, we contribute to the PIR on IFRS 3, in particular on the contentious issue of subsequent goodwill accounting, by assessing the impact of the introduction of the impairment-only approach from two perspectives.[8] Firstly, we analyze the comment letters submitted by various

---

5 See IFRS Research Round-up, Issue 1, April 2014, p. 5 (IASB, 2014a), which highlights the PIR process as an opportunity to use academic research in the standard setting process.

6 Similarly, Fülbier et al. (2009) stress researchers "neutrality, their analytical thinking and their detached reasoning".

7 As all development stages of the IASB's standard setting process, PIRs are, however, subject to oversight by the Trustees of the IFRS Foundation and their committee (DPOC) which oversees the due process of the IASB (IFRS Foundation, 2013, par. 2.1-2.4). During the PIR, the IASB has to report to the DPOC regularly (IFRS Foundation, 2013, par. 6.63).

8 On the basis of IFRS 3 Appendix A, in the following, we accept the definition of goodwill as an asset which represents "the future economic benefits arising from other assets acquired in a business combination that are not individually identified and separately recognized."

stakeholder groups in response to the RfI during the PIR with the aim of providing a neutral picture on their perceptions which is not subject to self-evaluation concerns. Secondly, we systematically review related academic literature providing evidence for or against different aspects of the impairment-only approach.

From this twofold approach, we derive a contribution which is relevant beyond the current PIR. Our content analysis of the comment letters sheds light on the advantages and disadvantages of the goodwill impairment test perceived by interested stakeholders, mainly from practice. By comparing these perceptions with high-quality academic research, we analyze to what extent they are justified by researchers' findings, how relevant current accounting research is from a standard setting and practice-oriented perspective, and identify differences between the two perspectives as well as research opportunities.

Our research shows that, on the one hand, stakeholders' views about the usefulness of the information provided by the impairment test are mixed, while they share widespread concerns about the cost-benefit relation and the extent of discretion involved in the tests. In general, stakeholders from countries with a British-American accounting system provide much more support for the current provisions than those with a Continental (European) background. On the other hand, academic research tends to support the former assumption that the impairment-only approach increases the usefulness of financial reporting in comparison to amortization. However, the concerns expressed about subjectivity and managerial discretion are confirmed by a number of studies that provide evidence for earnings management behavior through impairment decisions. Based on our results, we advise the IASB not to withdraw the current concept immediately, but rather suggest some short-term measures to address areas of improvement identified in the

PIR. The main changes suggested include a qualitative assessment that should be performed first in order to evaluate whether an impairment test needs to be conducted and the abolishment of the concept of value in use. Additionally, a comprehensive review of the accompanying disclosure requirements seems to be necessary. In the long-term, we need a larger project – reasonably in cooperation with the FASB – in which the subsequent treatment of goodwill is holistically reviewed. Academics should continue to contribute to the development of a conceptually sound, but practically feasible, goodwill accounting approach.

The remainder of this paper is organized as follows. Section 2 describes the historical development of the accounting for goodwill under IFRS from 1978 to the recent PIR on IFRS 3. The stakeholders’ perceptions regarding the impairment-only approach are examined in the third section on the basis of a content analysis of comment letter responses to the RfI. Section 4 presents our systematic analysis of related literature. Section 5 discusses our findings and develops avenues for the future development of goodwill accounting. Section 6 concludes.

2 Institutional Background

2.1 Development of Goodwill Accounting under IFRS

Overviews of the historical development of goodwill accounting have been provided by several authors for various jurisdictions and accounting regimes.[9] Hence, our remarks are limited to the most fundamental milestones of accounting for goodwill under IFRS and the foregoing changes under US GAAP, where necessary. The International Accounting Standards Committee (IASC), the predecessor

[9] Examples include Ding et al. (2008) for Great Britain, the US, Germany and France, Camfferman and Zeff (2006) and Kirsch (2006) for the IFRS reporting regime, and Boennen and Glaum (2014) for US GAAP and the recent IFRS history.

of the IASB, initially approached this issue when a project on business combinations was included on its agenda in June 1978. Besides the contentious topic of the acceptability of the pooling-of-interests method[10], the second main issue in this project was the subsequent accounting for goodwill capitalized under acquisition accounting (Camfferman and Zeff, 2006).

The first outcome of this difficult project[11], the exposure draft E22, contained not less than three different approaches to account for a business combination[12] and offered three alternatives for the treatment of arising goodwill: Immediate expensing, amortization or charging the residual to the acquirer's equity. Camfferman and Zeff (2006) ascertain that the accounting for goodwill was the most widely discussed issue by respondents to E22 who advocated "almost every conceivable position on capitalization, amortization periods, and charging to equity […] forcefully." The final standard IAS 22 *Accounting for Business Combinations*, issued in 1983, allowed only purchase accounting and pooling (applicable to "uniting-of-interests" under IAS 22) with tightened conditions for the use of the latter. With regard to the subsequent accounting of goodwill, IAS 22 offered the options to charge goodwill directly to equity or to amortize goodwill systematically over its useful life (Kirsch, 2006).

In the late 1980s, the IASC aimed to increase the comparability of financial statements by reducing the large number of alternative accounting treatments that

[10] Under the pooling-of-interests method, the assets and liabilities of both of the combined entities are accounted for in the consolidated financial statements at their respective pre-acquisition book values.

[11] The development of the first business combination standard was complicated by contemporaneous deliberations upon a new UK standard, the recent positions on the matter established in the US (APB Opinions No. 16 *Business Combinations* and No. 17 *Intangible Assets*), the diversity among European accounting traditions as well as the development of the Seventh EEC Directive (Camfferman and Zeff, 2006).

[12] In addition to purchase and pooling, E22 proposed to allow the so-called new entity accounting ("fresh start method"), where the assets and liabilities of all combining entities are revalued at their fair value (Kirsch, 2006).

the standards contained. The exposure draft E32 *Comparability of Financial Statements*, published in 1989, proposed reducing the number of options within 12 standards. One of the options that were suggested for elimination was the alternative offered by IAS 22 to write-off goodwill immediately to equity. With regard to the treatment to be sustained, the amortization of acquired goodwill, the exposure draft further proposed a mandatory amortization period of five years, unless a longer period, up to 20 years, could be justified. Although this proposal was highly controversial, the position was maintained and finally incorporated in IAS 22 *Business Combinations* (revised 1993) issued in 1993.[13]

In the 1990s, when the IASC worked on the accounting for intangible assets, the importance of a standard on asset impairment became obvious. E55, the exposure draft on impairment, was agreed on in April 1997 and in April 1998, IAS 36 *Impairment of Assets* was approved, finally. Although standards such as IAS 16 and IAS 22 already contained basic provisions on impairment testing, IAS 36 can be seen as the major step in introducing a sophisticated impairment test procedure under IFRS. Shortly afterwards, in July 1998, the Board approved IAS 38 *Intangible Assets* as well as a revised version of IAS 22. With these standards the amortization periods of goodwill and intangible assets were aligned. Both standards required goodwill and intangibles, respectively, to have a finite useful life and contained a rebuttable presumption that the useful life does not exceed 20 years. In this case, goodwill had to be amortized systematically over the best estimate of its useful life and, additionally, to be tested (at least) annually for impairment in accordance with the rules of IAS 36.[14]

[13] See IAS 22 (1993) and Camfferman and Zeff (2006) for the whole paragraph.
[14] See IAS 22 (1998), Kirsch (2006), and Camfferman and Zeff (2006) for the whole paragraph.

The current stage of goodwill accounting was entered into around the beginning of the 21st century. In September 1999, the FASB issued Exposure Draft 201 (ED 201) on business combinations and intangible assets with the aim of enhancing international convergence. The standard setter intended to eliminate the pooling method and allow only the purchase method for the accounting of business combinations. In addition, it was proposed that goodwill should be amortized over 20 instead of 40 years. The FASB received more than 200 comment letters, of which 60% of corporate respondents opposed the abolishment of pooling.[15]

Subsequently, ED 201 became more prominent and finally reached the US Congress. In the course of the hearings it became apparent that the only supporter of the ED was the FASB itself. Congresspersons urged the FASB to consider alternative ways for the treatment of goodwill. Beginning in May 2000, two interest groups proposed the idea of performing an annual impairment test for goodwill instead of regular amortization to the FASB. The FASB followed this idea and issued a revised ED 201 in February 2001 which included the impairment-only approach for goodwill as the only allowable subsequent measurement method. In response to the revised exposure draft, the FASB received more than 200 comment letters and over 70% of corporate respondents supported the impairment-only approach. Finally, in June 2001, the FASB issued SFAS 141 and 142 which required the purchase method for business combinations and the impairment-only approach for subsequent measurement of goodwill.

After succeeding the IASC, the IASB also started a project on business combinations in 2001 seeking to improve the quality of business combinations accounting as well as enhanced international convergence. The first phase of the project was

15 For the whole paragraph see Ramanna (2008).

concluded in March 2004 with the issuing of IFRS 3 *Business Combinations* as well as revised versions of IAS 36 and IAS 38 (IFRS 3.BC – Background information). In addition to the elimination of the pooling-of-interests method and, thus, requiring the use of the acquisition method for all business combinations, the Board abolished the amortization of acquired goodwill. The main arguments for and against the introduction of the impairment-only approach as derived from the Basis for Conclusions and Dissenting Opinions on IFRS 3 (2004) are listed in Appendix 1. The non-amortization goes hand-in-hand with the requirement to test goodwill at least annually for impairment in accordance with the provisions of IAS 36.

Ten years later, we evaluate the impact of the regulatory change and assess whether the arguments pro and contra the impairment-only approach in comparison to amortization put forth in the early 2000s have materialized. Therefore, we examine the perceptions of stakeholders as well as related findings of researchers in order to suggest avenues for the further development of the standards.

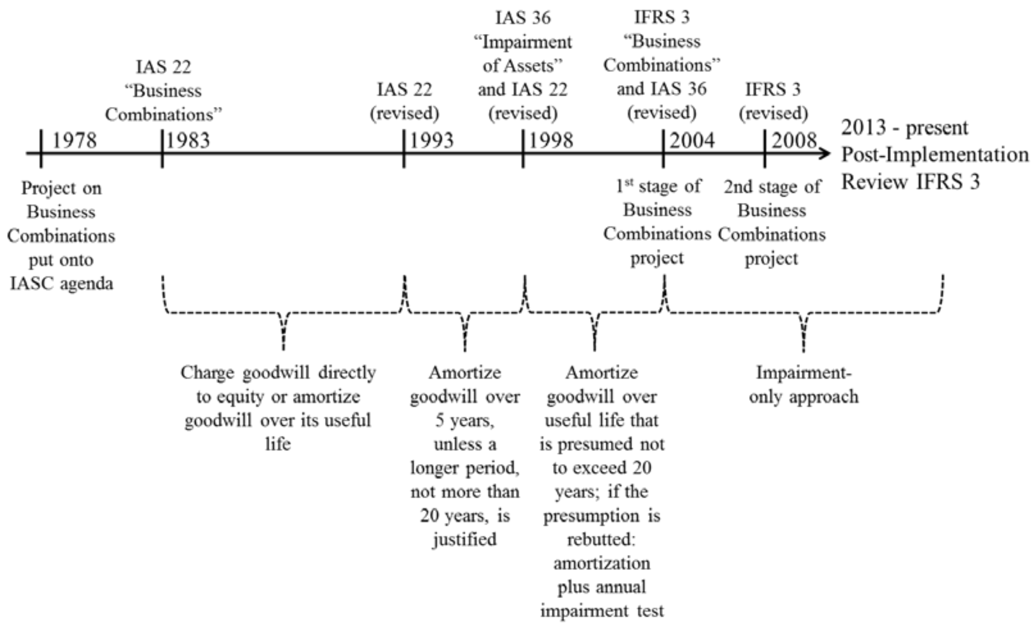


Figure 1: The history of goodwill accounting under IFRS

2.2 The Post-Implementation Review on IFRS 3

Following the PIR on IFRS 8 *Operating Segments* that was completed in 2013,[16] the PIR on IFRS 3 is the second in the history of the IASB.[17] According to the *Due Process Handbook* of the IFRS Foundation, a PIR has to be conducted for every new standard or major amendment.[18] The aim of a PIR is to assess the effects of the new accounting provisions on financial reporting from the perspective of various stakeholders in the IFRS community, such as auditors, preparers, and users of financial statements. Issues to be considered are those that have been important or contentious in the development of the standard under review as well as (unexpected) costs or implementation problems. Although a PIR should normally be conducted two years after the new standard is internationally applied, the IASB did not start the PIR on IFRS 3 before 2013.

In the first phase of the PIR, the standard setter sought input from different parties that had gained experience with IFRS 3 through a variety of channels (IASB, 2014b). Following this process of identification of potential matters to be covered during the PIR and the determination of the scope of the review, the IASB issued a formal RfI that has been open for public comment until May 30, 2014. The RfI contained ten explicit questions on business combinations issues, such as the definition of a business, fair value measurement, and unexpected costs and benefits or implementation problems of the new provisions. In addition, respondents were encouraged to report on any additional matters and to assess whether their responses have been affected by the global financial crisis. With regard to the subsequent accounting treatment of goodwill acquired in a business combination, the

16 For information on the PIR on IFRS 8 see IASB (2013a).
17 For this section of the paper and further information on the PIR on IFRS 3 see IASB (2014b).
18 For general information about the PIR process of the IASB given in this section see the respective parts of the *Due Process Handbook* (IFRS Foundation, 2013, par. 6.52-6.63).

IASB explicitly asked about (1) the usefulness of the non-amortization approach for goodwill and the related reasons for the respondent's assessment, (2) whether and how the information provided by the impairment test needs to be improved, and (3) the main implementation, auditing and enforcement challenges in testing goodwill for impairment (see IASB, 2014c, Question 5). On the basis of the comments received in response to the RfI together with other information or evidence,[19] the IASB will conclude the PIR and decide which steps, if any, to take to improve financial reporting. A PIR does not necessarily lead to changes to the accounting requirements under consideration.

3 Stakeholders' Perceptions of the Impairment-only Approach

3.1 Development of Research Questions

Goodwill accounting and especially the impairment-only approach have been widely discussed. The current PIR process offers a good opportunity to understand the views of all parties involved, because it provides up-to-date feedback about the attitudes of various stakeholders. One way to express concerns about or to agree with the present accounting requirements of IFRS 3 and IAS 36 regarding subsequent goodwill accounting is to write comment letters in response to the official RfI in the second phase of the PIR.

For an accounting method like the impairment-only approach for goodwill, it is essential that it is accepted worldwide. Therefore, it is vital to understand the views of stakeholders with different backgrounds and the diverse arguments they

[19] In this context, the *Due Process Handbook* (IFRS Foundation, 2013, par. 6.60) explicitly refers to (a) an analysis of financial statements/other financial information, (b) a review of academic and other research, and (c) other consultative activities with relevant stakeholders.

present. The IASB also emphasizes its expectation to assess the effects of IFRS 3 from the perspectives of various stakeholders (IASB, 2014c).[20] Therefore, in our analysis, stakeholders are classified in two different ways:

Interest Groups

Following prior literature, we divided the stakeholders into nine different interest groups: Accounting profession (i.e. professional accountancy bodies and public accounting firms), accounting standard setters, regulators (and other government-related entities), non-financial corporations, non-financial corporations' trade associations, financial analysts, financial institutions (including their trade associations), academics, and others (Wallace, 1990; Kenny and Larson, 1995; Kwok, 1999; Larson, 2002 and 2007; Chatham et al., 2010).

Country and Region

According to prior research, the response level and support of accounting standards deviates between regions and countries (e.g. Kenny and Larson, 1995; MacArthur, 1996 and 1999; Larson, 2002 and 2007). However, the success of a global reporting regime, such as IFRS, depends on its worldwide acceptance (Schaub, 2005; Tweedie and Seidenstein, 2005). In addition, research provides evidence that the application of IFRS differs across countries and is influenced by national accounting traditions (e.g. Kvaal and Nobes, 2012; Glaum et al., 2013). Hence, in addition to analyzing differences between stakeholder groups, we group the following research questions by country and region. The latter approach also allows

[20] The importance of the type of respondent and the geographical origin in the context of comment letter analyses is also emphasized in the *Due Process Handbook* of the IFRS Foundation (IFRS Foundation, 2013, par. 3.66). Chatham et al. (2010) point out that the preferences of stakeholders may receive varying attention in the standard setting process and provide an example.

for a differentiation with regard to the origin of the stakeholders' accounting system.

Research Questions

In the course of the introduction of the impairment-only approach, the IASB argued that an amortization expense is at best an arbitrary estimate of the consumption of acquired goodwill (IFRS 3 (2004).BC140). According to the IASB, non-amortization of goodwill coupled with annual or, in case of indicators that goodwill might be impaired, more frequent impairment tests would provide users with more useful information (IFRS 3 (2004).BC142). Our first research question relates to the opinion of stakeholders about whether, ten years after the introduction of the impairment-only approach, this method in fact provides more useful information than amortization. Thus, the question is also in line with one of the aims of the PIR to assess whether "IFRS 3 provides information that is useful to users of financial statements" (IASB, 2014c).

> *Research Question 1 (RQ1): Does the impairment-only approach provide more useful information than amortization?*

The IASB further noted that a necessary condition for providing more useful information via the impairment-only approach is that the impairment test is rigorous and operational devised (IFRS 3 (2004).BC142). Hence, our second research question focuses on this aspect in order to analyze whether stakeholders perceive the impairment test as rigorous and operational devised. This research question also aims to contribute to the IASB's request for feedback about "areas of IFRS 3 that represent implementation challenges and, as a result, impair the consistent implementation of the requirements" during the PIR (IASB, 2014c).

Research Question 2 (RQ2): Is the impairment test rigorous and operational devised?

In addition, we analyze the arguments used by supporters and opponents of the impairment-only approach and the alternative, i.e. regular amortization. We are particularly interested in the reasons stakeholders mention after having considerable experience with the impairment-only approach, because these are important to better understand their positions and to identify areas for potential improvement. This research question also relates to all of the parts of question 5 of the RfI during the current PIR (see section 2.2.).

Research Question 3 (RQ3): What are the arguments for and against the impairment-only approach in comparison to the amortization of goodwill?

3.2 Sample and Research Approach: Content Analysis of Comment Letters

Similar to the development of a new standard, the PIR consists of several project stages during which the IASB seeks feedback from interested parties involved with IFRS 3. However, the feedback received through various channels during the first stage in order to establish the scope of the review and the design of the RfI has not been gathered in a formalized procedure allowing for a detailed analysis by researchers independent from the IFRS Foundation. Therefore, in line with a large body of literature, in particular in the field of lobbying research, we focus on comment letters that have been received in response to a formal request by the IASB. From the 100 submissions of parties commenting on the RfI of the PIR that have been publicly available on the IASB's website on August 27, 2014, we have eliminated 3 submissions of respondents that submitted two letters.[21] Consequently, 97 submissions have been treated as separate comment letters in our analyses.[22]

Content analysis was employed to analyze the 97 responses. In order to address the first two research questions, we identified the position of each stakeholder (Yes, Neutral, or No).[23] For *RQ3*, the arguments that were used by the respondents were coded according to the arguments used in the discussion upon the introduction of the impairment-only approach in the first phase of the business combination project (see Appendix 1). This list of arguments for and against the impairment-only approach in comparison to amortization has been complemented by a number of additional reasons identified during our initial analysis of the responses (for the complete list and categorization of arguments see Appendix 2). After testing the robustness of our coding strategy for a random sample of 15 comment letters, two of the authors analyzed and coded all of the remaining comment letters independently to figure out the most cited arguments regarding the support of the impairment test and the challenges stakeholders face as well as the position of the stakeholders regarding *RQ1* and *RQ2*.

21 Two submissions were found on the IASB's website from Henderson Global Investors, the European Federation of Financial Analysts (EFFAS) and IBM, respectively.

22 One submission as indicated on the IASB's website has been treated as one comment letter. Thus, submissions summarizing views of respondents to outreach activities of the submitter or delivering comment letters on behalf of other constituents have been treated as one comment letter. Submissions prepared in collaboration with other constituents and submitted equally by more than one constituent have been treated separately.

23 Responses have only been evaluated as "Yes" or "No", if the opinion of the respondent was relatively unambiguous. In all remaining cases "Neutral" has been assigned to the respective comment letter. This includes respondents that gathered the views of various stakeholders and did not express clear preferences which views they themselves would support.

The results have been largely consistent, especially regarding the overall assessment required to answer *RQ1* and *RQ2*.[24] The rate of agreement was between 85% and 95% with the lowest rate achieved regarding the coding of the 35 different qualitative arguments used (85.2%). Any difference has been discussed until consensus was reached.[25]

Although question 5 of the RfI explicitly addressed the subsequent accounting for goodwill and asked questions similar to our research questions, we analyzed the comment letters in their entirety in order to find all relevant arguments. This is due to our observation that some questions are inevitably intertwined while others can be expected to be answered with regard to the impairment test. For example, question 4 covered the separate recognition of intangible assets from goodwill as well as the treatment of negative goodwill, while question 10 asked respondents about areas representing benefits of IFRS 3 and the related amendments or causing considerable unexpected costs to financial statement stakeholders. Moreover, some respondents provided overall responses without referring to specific questions. Thus, while answers to question 5 were clearly most important, we went through the whole responses and gathered information regarding our research questions.

---

[24] The rates of agreement were 91.5% (*RQ1*) and 93.9% (*RQ2*), respectively. Using the Kappa statistic for inter-annotator agreement (following the suggestion of Cohen, 1960, and Giner and Arce, 2012), we control for subjectivity obtaining no significant differences between the results of the two authors who analyzed *RQ1* and *RQ2* (Kappa values: *RQ1* = 0.886, *RQ2* = 0.919, both significant at 1%).

[25] Our approach to the content analysis largely follows Chatham et al. (2010).

3.3 Results of Comment Letter Analysis

Profiles of Respondents

Altogether, 97 interested parties from more than 25 countries responded to the IASB's RfI via official comment letters. In the light of the only previous PIR of the IASB which related to IFRS 8 and attracted 62 comment letter responses (IASB, 2013b), this indicates the importance and controversial nature of IFRS 3 and the related standards as well as the progress of the IFRS reporting regime regarding widespread interest and acceptance. Around half of the comment letters (49 responses, 51% of total) were submitted by respondents from all over Europe (EU countries: 37, 38%). Among the European countries, stakeholders from the UK (14, 14%), Germany (9, 9%), France (7, 7%), and Switzerland (6, 6%) have responded most frequently to the RfI. Australian constituents were the most active group outside Europe (5, 5%) followed by respondents from Canada and Singapore (4, 4% each). The stakeholders from the US, having recently conducted a PIR on the US GAAP business combinations standard, were comparatively silent (3, 3%). While there were letters from Latin America (5, 5%), Asia (16, 16%), and Africa (4, 4%), no single comment letter has been received from Eastern Europe and Russia pointing out further potential for the IFRS reporting regime to gain broader international acceptance. Organizations, particularly international public accounting firms, that are present around the globe and therefore not assigned to specific countries ("International") account for 10% (10 responses) of total respondents. Overall, the geographical coverage is comparable to that in the PIR on IFRS 8.

Differentiating the constituents according to the origin of their accounting system, it becomes evident that participation was balanced between stakeholders from countries with a British-American accounting system (38 responses, 39% of total) and from countries with a Continental (European) accounting system (33, 34%).[26]

The analysis by interest groups shows that non-financial corporations including their trade associations provided the most comment letters to the IASB (31 responses, 32% of total). Professional accountancy bodies and public accounting firms (the accounting profession) submitted 21 responses (22%) which makes the representation of this stakeholder group comparable to the group of accounting standard setters (18, 19%). The remaining stakeholder groups are represented comparatively weakly with regulators (and other government-related entities) submitting 8 responses (8%) followed by academics (5, 5%), financial analysts (4, 4%), financial institutions (4, 4%), and others (6, 6%). As with the geographical coverage, the composition of respondents is similar to that in the PIR on IFRS 8.

Irrespective of whether financial institutions are seen as prepares or, because of their investment-related activities, as users of financial reporting, it is obvious that users are not well-represented in the overall response to the RfI. Although this observation is consistent with prior research (e.g. Durocher et al., 2007; Chatham et al., 2010), this is still remarkable considering that users are the most important stakeholder group whose needs should be fulfilled with financial reporting under IFRS. The weak participation of users further highlights the importance of conducting further outreach activities in order to gain more representative, in-depth insights into this stakeholder group's views on the topics covered by the PIR.

26 We follow the classification by Mueller et al. (1997). Since the number of respondents from countries with a South American Model is low and the respondents that cannot be categorized into the Mueller et al. (1997) model include organizations that have been regarded as "International" or "European" which can obviously represent views from various accounting system origins, we only refer to the British-American and the Continental accounting systems in our further analyses.

Moreover, the strong commitment to the PIR by preparers, mostly from non-financial industries, has to be modified in respect of the much higher number of companies preparing financial statements (in accordance with IFRS) forming the preparers' total population. The fact that "for every non-financial corporation that provided a letter, there are literally hundreds if not thousands of firms that did not respond" (Chatham et al., 2010) is not unique to the PIR on IFRS 3. Prior research attributed the non-participation of firms to several reasons such as insufficient awareness about the project, no or limited economic effects of the proposals, alternative ways to influence the standard setter, costs of the comment letter response, or agreement with the standard setter.[27]

Finally, it is noteworthy that only a very limited number of respondents stem from academia (5).[28] Thus, the results of our content analysis mainly reflect the perceptions from practitioners' perspectives which is important for the interpretation and discussion of these findings in relation to the findings of academic research. Table 1 provides a summary of respondents by country and interest group.

[27] See Chatham et al. (2010) including further references.

[28] We note, however, that some other respondents that gathered input from various parties in their jurisdiction before drafting their response, among others, also considered the views of academics. Examples include the comment letters from the Institute of Singapore Chartered Accountants (ISCA) and the South African Institute of Chartered Accountants (SAICA). In none of such cases, we observe indications that the views from academics had a major impact on the final comment letter.

Table 1

Classification of PIR IFRS 3 Request for Information Respondents by Stakeholder and Country

Country	Accounting Profession	Standard Setters	Regulators	Non-Finl Corporations	Non-Finl Corp Trade Assns	Financial Analysts	Financial Institutions	Academics	Others	Total (%)
EU:										
Austria		1						1		**2 (2%)**
France		1		2	3	1				**7 (7%)**
Germany	1	1		3	1		2	1		**9 (9%)**
Italy		1								**1 (1%)**
Spain				1			1			**2 (2%)**
Sweden		1			1					**2 (2%)**
United Kingdom	2	1		7		2	1		1	**14 (14%)**
Total EU	3	6		13	5	3	4	2	1	**37 (38%)**
Other Non-EU European:										
Norway		1								**1 (1%)**
Switzerland			1	3	1			1		**6 (6%)**
European*	1		2		1	1				**5 (5%)**
Total Europe	4	7	3	16	7	4	4	3	1	**49 (51%)**
Non-European:										
Argentina				1						**1 (1%)**
Australia	2	1						1	1	**5 (5%)**
Brazil		1			1					**2 (2%)**
Canada	1	1		1	1					**4 (4%)**
China/Hongkong	1		2							**3 (3%)**
India			1							**1 (1%)**
Japan	1	1			1					**3 (3%)**
Kenya	1									**1 (1%)**
Malaysia	1	1								**2 (2%)**
Mauritius			1							**1 (1%)**
Mexico		1								**1 (1%)**
New Zealand		1								**1 (1%)**
Singapore	1	1		1				1		**4 (4%)**
South Africa	1				1					**2 (2%)**
South Korea		1	1							**2 (2%)**
United States				1					2	**3 (3%)**
Asia-Oceanian*		1								**1 (1%)**
Latin American*		1								**1 (1%)**
International**	8								2	**10 (10%)**
Total non-European	17	11	5	4	4			2	5	**48 (49%)**
Total Responses	**21 (22%)**	**18 (19%)**	**8 (8%)**	**20 (21%)**	**11 (11%)**	**4 (4%)**	**4 (4%)**	**5 (5%)**	**6 (6%)**	**97 (100%)**

* European, Asia-Oceanian, and Latin American include regional international organizations such as the European Securities and Markets Authority (ESMA).
** International includes global organizations such as international public accounting and auditing firms.

Table 1: Classification of PIR IFRS 3 Request for Information Respondents by Stakeholder and Country

Usefulness of Impairment-only Approach in Comparison to Amortization

Our first research question, *RQ1*, considers whether the impairment-only approach provides more useful information than amortization as expected by the IASB in the course of the introduction of the impairment-only approach in 2004. Having about ten years of experience with the current provisions, stakeholders' views about the usefulness of the impairment-only approach compared to the amortization model are not only mixed, but almost perfectly balanced between the two models. 26 comment letters (27% of total) have been identified as expressing the opinion that the current approach provides more useful information than amortization, while 25 responses (26%) have been interpreted as negating the impairment-only approach to lead to more useful information. The remaining 46 letters (47%) did not take a clear position towards our question. This overall result about the perceptions of stakeholders shows that we still seem to be far from consensus about the preferable method for subsequent goodwill accounting.

Table 2, Panel A shows the support of the impairment-only approach in terms of usefulness by interest groups. Most stakeholder interest groups contain heterogeneous opinions on the matter and reflect the balanced views that are found in the overall analysis. However, slight differences regarding the support of the impairment-only approach can be observed. In particular, the majority (75%) of the financial institutions express concerns about the usefulness of the current model. Furthermore, there are more non-financial corporations against (8) the impairment-only approach than in favor (5), while their trade associations provide the standard setter with perfectly balanced feedback (Yes = 3, No = 3). While the accounting profession shows a similarly balanced pattern (5, 4), standard setters perceive the impairment-only approach as comparatively useful (7, 4). In addition, we used the Kruskal-Wallis test to analyze whether the opinions of stakeholder interest groups differ with regard to *RQ1*. The test reveals no statistically significant differences between the groups.

The analysis by country and region provides insightful results (see Table 2, Panel B). While respondents from Europe tend to negate the higher usefulness of the impairment-only approach (Yes = 12, No = 21), only four out of 48 non-European stakeholders were of the view that the current model does not lead to higher usefulness compared to amortization. Correspondingly, 14 non-European respondents were supportive of the impairment-only approach. The respondents from the UK, the most active single country, sent the highest number of supportive comment letters (6), while only two respondents were against the impairment-only approach. Conversely, countries having a German accounting origin (Austria, Germany, and Switzerland) show strong disagreement with the assumption of a higher usefulness of the impairment-only approach. Only two respondents from the three countries provide support for the impairment-only approach, while twelve out of the 17 responses from these countries are clearly opposed to this accounting treatment.

These findings are reflected in a further analysis based on the different accounting systems according to Mueller et al. (1997) (see Table 2, Panel C). Respondents from countries with accounting systems that are considered as belonging to the group of British-American accounting models are much more positive about the usefulness of the impairment-only approach (Yes = 13, No = 3) than respondents from countries with a Continental (European) accounting system (6, 19). This observation is also evident from a statistical perspective. The Kruskal-Wallis test finds highly significant differences between these two groups of accounting systems ($p < 0.01$).

Is the Impairment Test Rigorous and Operational?

Our second research question, *RQ2*, addresses the stated condition for the provision of useful information by the impairment-only approach, i.e. the question whether stakeholders view the impairment test as rigorous and operational devised. Overall, the results are less positive for the impairment regime than those with regard to *RQ1*. 40% of the stakeholders (39 responses) express serious concerns about the design of the current impairment test provisions, while only 17 comment letters (18%) have been rated as assessing the impairment test as rigor and operational. Again, the remaining 41 letters (42%) either did not address the questions regarding subsequent goodwill accounting at all or did not take a clear position towards the research question. Thus, the overall result supports the statement of Hans Hoogervorst that "(i)n practice, these impairment tests do not always seem to be done with sufficient rigour."[29] Obviously, stakeholders are not wholly convinced of the current impairment test procedures.

The analysis by interest groups (see Table 2, Panel A) shows slight differences between the groups. Among members of the accounting profession (Yes = 2, No = 7), standard setters (3, 7), regulators (1, 4), financial analysts (1, 3), and financial institutions (0, 3) the view that the impairment test is not operational and rigorous devised outweighs the opposite opinion relative strongly. Only non-financial corporations including their trade associations (10, 11) provide a balanced view with support and criticism almost equally represented. Again, no statistically significant differences were found between interest groups.

With regard to the differentiation by country and region (see Table 2, Panel B), differences between European and non-European stakeholders are less pronounced than was the case for the assessment of usefulness (*RQ1*). Respondents from European countries (Yes = 12, No = 24) as well as those from countries outside Europe including global organizations (5, 15) share concerns about the test being rigorous and operational. However, at the country-level, UK respondents

[29] See footnote 2 for further information.

are most positive with six comment letters indicating that the impairment test is rigorous and operational and only three responses claiming the opposite. On the other hand, Austria, Germany, and Switzerland, form a strong opposition with eleven respondents that are not convinced of the test and only two showing clear support.

Similarly, the analysis according to the accounting system shows much more support of the current impairment test procedures among constituents from countries with a British-American model (Yes = 9, No = 7) compared to those from countries with a Continental (European) model (6, 21). Again, the differences between these two groups are statistically significant ($p < 0.01$). Taken together with the results regarding *RQ1*, this indicates that the background of stakeholders and, in particular, the resemblance of their national accounting systems to IFRS is of importance for the perceptions of respondents.

The analyses regarding the usefulness of the impairment-only approach and the design of the impairment test provide important insights about the overall perceptions of stakeholders and whether there are differences between stakeholder groups. The results, especially regarding the design of the test, suggest that the current accounting model for goodwill requires further development. However, in order to move ahead in the right direction, it is necessary to understand the reasons behind the overall attitudes of stakeholders towards the impairment-only approach. Therefore, in the following, we analyze the arguments used by supporters and opponents of the impairment-only approach and the alternative, i.e. regular amortization (*RQ3*).

Table 2

Support of Impairment-only Approach and Impairment Test by Stakeholders

	Is IoA more useful?			Is impairment test rigorous/operational?		
	Yes	Neutral	No	Yes	Neutral	No
Panel A: Stakeholders by Interest Group						
Accounting Profession	5	12	4	2	12	7
Standard Setters	7	7	4	3	8	7
Regulators	2	5	1	1	3	4
Non-Finl Corporations	5	7	8	7	6	7
Non-Finl Corp Trade Assns	3	5	3	3	4	4
Financial Analysts	2	1	1	1		3
Financial Institutions		1	3		1	3
Academics		4	1		4	1
Others	2	4			3	3
Total	26	46	25	17	41	39
Percentage	27%	47%	26%	18%	42%	40%
Panel B: Stakeholders by Country						
EU:						
Austria			2		1	1
France	3		4	3		4
Germany	1	2	6	1	2	6
Italy		1				1
Spain	1		1	1		1
Sweden		1	1			2
United Kingdom	6	6	2	6	5	3
Total EU	11	10	16	11	8	18
Other Non-EU European:						
Norway			1			1
Switzerland	1	1	4	1	1	4
European		5			4	1
Total Europe	12	16	21	12	13	24
Non-European:						
Argentina	1			1		
Australia	1	4			5	
Brazil	1	1			2	
Canada	1	3		1	3	
China/Hongkong	1	1	1			3
India	1			1		
Japan		3			2	1
Kenya	1				1	
Malaysia	1	1			1	1
Mauritius		1			1	
Mexico	1			1		
New Zealand		1			1	
Singapore		4			3	1
South Africa		1	1		1	1
South Korea		2			1	1
United States	1	2			2	1
Asia-Oceanian		1				1
Latin America	1			1		
International	3	5	2		5	5
Total non-European	14	30	4	5	28	15
Total	26	46	25	17	41	39
Percentage	27%	47%	26%	18%	42%	40%

Table 2 (continued)

Support of Impairment-only Approach and Impairment Test by Stakeholders

	Is IoA more useful?			Is impairment test rigorous/operational?		
	Yes	Neutral	No	Yes	Neutral	No
Panel C: Stakeholders by Accounting System						
British-American Model	13	22	3	9	22	7
Continental Model	6	8	19	6	6	21
South American Model	2	1		1	2	
Others	5	15	3	1	11	11
Total	26	46	25	17	41	39
Percentage	27%	47%	26%	18%	42%	40%

The categorization follows the Mueller et al. (1997) model. The following countries have been assigned to the accounting systems:

British-American Model:	United Kingdom, Australia, Canada, India, Kenya, Malaysia, Mexico, New Zealand, Singapore, South Africa, United States
Continental Model:	Austria, France, Germany, Italy, Spain, Sweden, Norway, Switzerland, Japan
South American Model:	Argentina, Brazil
Others:	European, China/Hongkong, Mauritius, South Korea, Asia-Oceania, Latin-America, International

Table 2: Classification of PIR IFRS 3 Request for Information Respondents by Stakeholder and Country

Arguments in favor of the Impairment-only Approach in Comparison to Amortization

We arrange all qualitative arguments used by the stakeholders - divided into those that are used in favor of the impairment-only approach (contra amortization) and those that are brought forward against the impairment-only approach (pro amortization) - around the fundamental elements of the Conceptual Framework for Financial Reporting of the IASB. The first category (*Usefulness Criteria*) consists of arguments that target the overall goal of financial reporting which is to provide information that is useful to potential and existing capital providers of the reporting firm (Conceptual Framework, OB2). The question addressed with these arguments is whether the impairment-only approach leads to more useful information in comparison to amortization (see also *RQ1* above).

In accordance with the fundamental qualitative characteristics of useful financial reporting (see Conceptual Framework, QC5-QC18), we further subdivide the *Usefulness Criteria* into *Relevance Criteria* and *Faithful Representation Criteria* in order to derive deeper insights into the sources of respondents' satisfaction or dissatisfaction with the provisions under review. Within the *Relevance Criteria*, we further separate arguments that are relevant to the stewardship function of financial reporting (*Stewardship/Accountability*). Within the *Faithful Representation Criteria*, we form a subgroup of arguments that are related to the question whether the current impairment test is rigorous and operational devised (*Operational and Rigor*). The arguments of this category provide insights into the reasons why stakeholders' assessments regarding this question cannot be regarded as satisfactory (see *RQ2* above). For both subcategories, *Relevance* and *Faithful Representation*, we further separate arguments that relate to *Disclosures*.

Besides the *Usefulness Criteria*, we distinguish arguments that relate to the cost constraint on useful financial reporting (*Cost Considerations*) and arguments that are neither related to the goal of financial reporting nor to *Cost Considerations* (*Other Criteria*). Starting from the arguments that have already been addressed during the debate on the introduction of the impairment-only approach in 2004, we identified 35 qualitative arguments that have been used in the responses. Table 3 provides an overview of our framework of categories and arguments as well as the frequencies with which the single arguments have been mentioned by respondents to the RfI of the current PIR. For a description of the arguments see Appendix 2.

Table 3

Overview of Arguments used by Stakeholders regarding the Impairment-only Approach

Usefulness Criteria

Does the impairment-only approach lead to more useful information compared to amortization?

No.	Pro impairment-only approach	Frequency	No.	Contra impairment-only approach	Frequency
	Relevance Criteria			***Relevance Criteria***	
1	IoA provides more useful information than Amortization	14	*11*	IoA does not provide useful information - impairment charges come too late	23
2	Amortization is not of significant value to users	4	*12*	Information of IoA is not used by users	14
3	Information provided by IoA has predicitive value	3	*13*	IoA leads to recognition of internally generated goodwill	42
4	Information provided by IoA is relevant/has confirmatory value	16	*14*	No impairment losses are recognized because of test on high CGU-level	15
			15	Goodwill is tested on CGUs that are subject to restructuring - Disconnection between what has been bought and what is tested	10
	Stewardship/Accountability			***Stewardship/Accountability***	
5	Impairment testing ensures accountability for investments made and provides insights into management views	15	*16*	Amortisation means greater accountability	9
	Disclosures			***Disclosures***	
6	Disclosures provide useful additional information	9	*17*	Insufficient/Inappropriate/non-entity-specific/redundant/unnecessary disclosures	29
	Faithful Respresentation Criteria			***Faithful Respresentation Criteria***	
7	Amortization is an arbitrary estimate of consumption of goodwill	20	*18*	Amortization over useful life reflects consumption of goodwill more representationally faithful than IoA	26
			19	Amortization is well-understood and well-established in practice and leads to consistent application	10
			20	Goodwill is an asset with limited useful life	22
			21	IoA reduces comparability between organically and anorganically grown companies	8
				Operational and rigour	
			22	High judgment and managerial discretion regarding estimates and assumptions	53
			23	Managerial discretion in identification and restructuring of and goodwill allocation to CGUs	36
			24	Impairment testing is a complex exercise	33
			25	Goowill impairment is difficult in presence of non-controlling interests	11
			26	Valuation concept value in use has shortcomings	26
			27	Valuation concept fair value less costs of disposal has shortcomings	7
	Disclosures			***Disclosures***	
8	Disclosures/Guidance ensure reliability of IoA	10	*28*	Compliance with disclosure requirements is not fulfilled	7

Table 3 (continued)

Overview of Arguments used by Stakeholders regarding the Impairment-only Approach

Cost Constraint on Useful Financial Reporting

No.	Pro impairment-only approach	Frequency	No.	Contra impairment-only approach	Frequency
9	Amortization does not remove need to conduct impairment tests	4	*29*	Impairment test is costly and time-consuming	48

Other Criteria

No.	Pro impairment-only approach	Frequency	No.	Contra impairment-only approach	Frequency
10	Other	10	*30*	Information of IoA is not used by the preparer's management	15
			31	Amortization reduces pressure on identification of intangibles in PPA and determination between asset acquisitions and business	12
			32	IoA is pro-cyclical when performance is low	9
			33	IoA increases volatility of profit and loss	9
			34	Other reporting regimes allow amortization	4
			35	Other	23

Table 3: Overview of arguments used by Stakeholders regarding the Impairment-only Approach

All in all, 10 different qualitative arguments have been used 105 times by the respondents as arguments in favor of the current goodwill accounting model. The most arguments have been provided by members of the accounting profession and standard setters (58 arguments, 55% of total pro arguments) which reflects not only their high representation, but also their expertise as well as their contribution to standard setting. On the contrary, preparers and users of financial reporting together only mentioned 26 arguments (25%) in favor of the impairment-only approach. From a geographical standpoint, the only single country with respondents mentioning a considerable number of reasons for the impairment-only approach is the UK (20, 19%). Importantly, respondents from countries with a British-American accounting system (46, 44%) provided twice as many arguments in favor of the current provisions than respondents with a Continental accounting background (23, 22%) reflecting the oppositional positions of these two groups identified above. Table 4 and Table 5 provide overviews of the arguments used in favor of the impairment-only approach and their relative frequency by stakeholder interest groups as well as by country, region and accounting system.

Table 4

Overview of Arguments used by Stakeholder Groups pro Impairment-only Approach/contra Amortization

	No.	Pro impairment-only approach	Accounting Profession	Standard Setters	Regulators	Non-Finl Corporations	Non-Finl Corp Trade Assns	Financial Analysts	Financial Institutions	Academics	Others	Total
Usefulness Criteria		***Relevance Criteria***										
	1	IoA provides more useful information than amortization	2 (10%)	4 (22%)	1 (13%)	4 (20%)	1 (9%)	1 (25%)			1 (17%)	14 (14%)
	2	Amortization is not of significant value to users	2 (10%)	1 (6%)		1 (5%)						4 (4%)
	3	Information provided by IoA has predicitive value	1 (5%)		1 (13%)						1 (17%)	3 (3%)
	4	Information provided by IoA is relevant/has confirmatory value	3 (14%)	8 (44%)	2 (25%)		1 (9%)				2 (33%)	16 (16%)
		Stewardship/Accountability										
	5	Impairment testing ensures accountability for investments made and provides insights into management views	4 (19%)	6 (33%)	2 (25%)			2 (50%)			1 (17%)	15 (15%)
		Disclosures										
	6	Disclosures provide useful additional information	2 (10%)	2 (11%)	1 (13%)	2 (10%)		1 (25%)		1 (20%)		9 (9%)
		Faithful Respresentation Criteria										
	7	Amortization is an arbitrary estimate of consumption of goodwill	8 (38%)	4 (22%)	3 (38%)	2 (10%)	1 (9%)		1 (25%)		1 (17%)	20 (21%)
		Disclosures										
	8	Disclosures/Guidance ensure reliability of IoA	2 (10%)	2 (11%)		2 (10%)	1 (9%)		1 (25%)		2 (33%)	10 (10%)
Cost Constraint on Useful Financial Reporting												
	9	Amortization does not remove need to conduct impairment tests	2 (10%)	1 (6%)		1 (5%)						4 (4%)
Other Criteria												
	10	Other	2 (10%)	2 (11%)	1 (13%)	3 (15%)			1 (25%)		1 (17%)	10 (10%)
Total			28	30	11	15	4	4	3	1	9	105

Table 4: Overview of Arguments used by Stakeholder Groups pro Impairment-only Approach / contra Amortization

Table 5

Overview of Arguments used by Stakeholders by Country, Region and Accounting System pro Impairment-only Approach/contra Amortization

	No.	Pro impairment-only approach	United Kingdom	Total EU	Total Europe	Non-European	British-American Model	Continental Model	Total
Usefulness Criteria		***Relevance Criteria***							
	1	IoA provides more useful information than Amortization	3 (21%)	5 (14%)	8 (16%)	6 (13%)	8 (21%)	3 (9%)	14 (14%)
	2	Amortization is not of significant value to users	1 (7%)	1 (3%)	3 (6%)	1 (2%)	2 (5%)	1 (3%)	4 (4%)
	3	Information provided by IoA has predicitive value				3 (6%)	1 (3%)		3 (3%)
	4	Information provided by IoA is relevant/has confirmatory value	2 (14%)	3 (8%)	4 (8%)	12 (25%)	7 (18%)	3 (9%)	16 (16%)
		Stewardship/Accountability							
	5	Impairment testing ensures accountability for investments made and provides insights into management views	4 (29%)	4 (11%)	6 (12%)	9 (19%)	7 (18%)	3 (9%)	15 (15%)
		Disclosures							
	6	Disclosures provide useful additional information	3 (21%)	5 (14%)	5 (10%)	4 (8%)	4 (11%)	2 (6%)	9 (9%)
		Faithful Respresentation Criteria							
	7	Amortization is an arbitrary estimate of consumption of goodwill	2 (14%)	3 (8%)	7 (14%)	13 (27%)	9 (24%)	2 (6%)	20 (21%)
		Disclosures							
	8	Disclosures/Guidance ensure reliability of IoA	3 (21%)	5 (14%)	6 (12%)	4 (8%)	5 (13%)	4 (12%)	10 (10%)
Cost Constraint on Useful Financial Reporting									
	9	Amortization does not remove need to conduct impairment tests		2 (5%)	3 (6%)	1 (2%)		2 (6%)	4 (4%)
Other Criteria									
	10	Other	2 (14%)	3 (8%)	6 (12%)	4 (8%)	3 (8%)	3 (9%)	10 (10%)
Total			20	31	48	57	46	23	105

Table 5: Overview of Arguments used by Stakeholders by Country, Region and Accounting System pro Impairment-only Approach / contra Amortization

To support the impairment-only approach, respondents mostly used arguments assigned to *Relevance Criteria*, emphasizing the higher usefulness of impairment information compared to regular amortization which has also been the assumption by the IASB in the early 2000s. The general statements that the impairment-only approach would provide more useful information than amortization or that the impairment-only approach provides relevant information or has confirmatory value account for almost one third of all arguments used in favor of the current model (30 arguments, 29% of total pro arguments). Noticeably, 44% (8) of all participating standard setters argue that the impairment-only approach provides relevant information. Only three comment letters claim impairment information to be a signal to the market and/or having predictive value. While 9 (9% of total) respondents view the disclosures accompanying goodwill impairment tests, especially about the underlying key assumptions, as providing additional useful information, 15 (15%) of respondents point out that impairment tests ensure management's accountability for investment decisions or provide insights into the views of the management.

However, the most frequently used argument can be found in the *Faithful Representation* category. 20 (21%) of the stakeholders argue that amortization is an arbitrary estimate of the consumption of acquired goodwill, an argument which was also a major point for the standard setter's decision to introduce the impairment-only approach in 2004. Remarkably, this argument has been mentioned more often by members of the accounting profession, standard setters and regulators as compared to preparers and users. This indicates that the argument has a conceptual background with limited practical and economic impact for the latter groups. However, as with all arguments in favor of the current provisions, one has to interpret the results with caution, since parties agreeing with the standard setter's position tend to provide fewer arguments than opponents. Moreover, the boundaries between the criteria are not always clear-cut. Thus, the perception that amortization is an arbitrary estimate of goodwill consumption might also have been a reason for respondents claiming that the impairment-only approach provides more useful information than amortization. The idea that the reliability of information provided under an impairment-only regime can be ensured by adequate disclosures and guidance was brought forward by the IASB upon introduction of the non-amortization approach (IAS 36.BC198, BC201-202). Ten years later, 10 (10%) of the stakeholders join the standard setter in this argumentation.

Interestingly, only four participants of the PIR argue that the reintroduction of the amortization approach would not lead to high cost savings because firms would have to maintain impairment procedures and know-how in order to be able to conduct impairment tests when relevant indicators are identified. Irrespective of whether cost (and time) savings would be material or not, the argument brought forward underlines the importance of a rigorous and operational impairment test.

Arguments against the Impairment-only Approach in Comparison to Amortization

Table 6 and Table 7 present the 25 qualitative arguments mentioned against the impairment-only approach (in favor of regular amortization) by stakeholder interest groups as well as by country, region and accounting system. Altogether, the respondents used the arguments 501 times, thus, almost five times as many arguments as were used in favor of the impairment-only approach. In light of the mixed views on the usefulness of the current accounting model (see *RQ1* above), this could be interpreted as support for the notion by Chatham et al. (2010) that results about the agreement with the position of the standard setter should be interpreted with caution, since silence or no response "could be construed as agreement."[30] Again, the most arguments were mentioned by the accounting profession and accounting standard setters (234 arguments, 47% of total arguments contra impairment-only approach) which we attribute to their relatively high representation amongst respondents as well as to their knowledge about and interest in accounting provisions. However, preparers and users argue more actively against the impairment-only approach. In particular, non-financial corporations and their trade associations mentioned 124 arguments (25%). The four financial institutions are similarly active citing 37 single arguments against the impairment-only approach.

The geographic analysis shows that the countries with considerable numbers of arguments contra the impairment-only approach are France (44 arguments, 9% of total contra arguments), Germany (52, 10%), and the UK (66, 13%). This shows that, although having a positive overall attitude towards the impairment-only approach, the British IFRS community actively discusses the pros and cons of the goodwill accounting methods. The analysis regarding the respondents' accounting system reflects again our results from the overall assessment of the comment letters regarding *RQ1* and *RQ2*. While respondents from countries with the British-American model cited far more arguments supporting the current model than those from countries with Continental models, the latter mentioned more than 40% of all arguments used against the impairment-only approach (205 arguments). Respondents with a British-American influence cited only 143 (29% of total contra arguments) arguments against their preferred model.

[30] Moreover, the explicit questions asked in the RfI could be read as emphasizing potential deficiencies rather than strengths of the impairment test (see section 2.2.).

Table 6

Overview of Arguments used by Stakeholder Groups contra Impairment-only Approach/pro Amortization

No.	Contra impairment-only approach	Accounting Profession	Standard Setters	Regulators	Non-Finl Corporations	Non-Finl Corp Trade Assns	Financial Analysts	Financial Institutions	Academics	Others	Total
	Usefulness Criteria										
	Relevance Criteria										
11	IoA does not provide useful information - impairment charges come too late	4 (19%)	4 (22%)	4 (50%)	2 (10%)		4 (100%)	2 (50%)	1 (20%)	2 (33%)	23 (24%)
12	Information of IoA is not used by users	1 (5%)	5 (28%)	1 (13%)	2 (10%)		2 (50%)	2 (50%)		1 (17%)	14 (14%)
13	IoA leads to recognition of internally generated goodwill	15 (71%)	10 (56%)	3 (38%)	4 (20%)	3 (27%)	2 (50%)	3 (75%)	1 (20%)	1 (17%)	42 (43%)
14	No impairment losses are recognized because of test on high CGU-level	2 (10%)	6 (33%)	2 (25%)	2 (10%)		1 (25%)	1 (25%)	1 (20%)		15 (15%)
15	Goodwill is tested on CGUs that are subject to restructuring - Disconnection between what has been bought and what is tested	2 (10%)	2 (11%)	2 (25%)	1 (5%)		1 (25%)		1 (20%)	1 (17%)	10 (10%)
	Stewardship/Accountability										
16	Amortisation means greater accountability	1 (5%)	3 (17%)		3 (15%)		1 (25%)	1 (25%)			9 (9%)
	Disclosures										
17	Insufficient/Inappropriate/non-entity-specific/redundant/unnecessary disclosures	6 (29%)	10 (56%)	4 (50%)		5 (45%)	2 (50%)	1 (25%)		1 (17%)	29 (30%)
	Faithful Respresentation Criteria										
18	Amortization over useful life reflects consumption of goodwill more representationally faithful than IoA	4 (19%)	7 (39%)	2 (25%)	6 (30%)	5 (45%)		2 (50%)			26 (27%)
19	Amortization is well-understood and well-established in practice and leads to consistent application	2 (10%)		1 (13%)	3 (15%)	1 (9%)		1 (25%)		2 (33%)	10 (10%)
20	Goodwill is an asset with limited useful life	3 (14%)	8 (44%)		4 (20%)	2 (18%)	2 (50%)	2 (50%)	1 (20%)		22 (23%)
21	IoA reduces comparability between organically and anorganically grown companies	1 (5%)	1 (6%)	1 (13%)	2 (10%)			2 (50%)	1 (20%)		8 (8%)
	Operational and rigour										
22	High judgment and managerial discretion regarding estimates and assumptions	13 (62%)	14 (78%)	7 (88%)	7 (35%)	4 (36%)	2 (50%)	3 (75%)	1 (20%)	2 (33%)	53 (55%)
23	Managerial discretion in identification and restructuring of and goodwill allocation to CGUs	12 (57%)	8 (44%)	4 (50%)	3 (15%)	2 (18%)	1 (25%)	3 (75%)	1 (20%)	2 (33%)	36 (37%)
24	Impairment testing is a complex exercise	7 (33%)	7 (39%)	5 (63%)	5 (25%)	4 (36%)		1 (25%)	1 (20%)	3 (50%)	33 (34%)
25	Goowill impairment is difficult in presence of non-controlling interests	5 (24%)	2 (11%)	1 (13%)		3 (27%)					11 (11%)
26	Valuation concept value in use has shortcomings	6 (29%)	6 (33%)	2 (25%)	5 (25%)	1 (9%)	1 (25%)	2 (50%)	1 (20%)	2 (33%)	26 (27%)
27	Valuation concept fair value less costs of disposal has shortcomings	2 (10%)	1 (6%)	1 (13%)	3 (15%)						7 (7%)
	Disclosures										
28	Compliance with disclosure requirements is not fulfilled	2 (10%)	4 (22%)	1 (13%)							7 (7%)
	Cost Constraint on Useful Financial Reporting										
29	Impairment test is costly and time-consuming	10 (48%)	11 (61%)	4 (50%)	8 (40%)	10 (91%)		4 (100%)		1 (17%)	48 (49%)
	Other Criteria										
30	Information of IoA is not used by the preparer's management	1 (5%)	2 (11%)	1 (13%)	6 (30%)	2 (18%)		1 (25%)	1 (20%)	1 (17%)	15 (15%)
31	Amortization reduces pressure on identification of intangibles in PPA and determination between asset acquisitions and business	5 (24%)	3 (17%)		1 (5%)	2 (18%)			1 (20%)		12 (12%)
32	IoA is pro-cyclical when performance is low		3 (17%)	2 (25%)	2 (10%)			2 (50%)			9 (9%)
33	IoA increases volatility of profit and loss		2 (11%)	2 (25%)	1 (5%)	1 (9%)		2 (50%)		1 (17%)	9 (9%)
34	Other reporting regimes allow amortization	2 (10%)	1 (6%)				1 (25%)				4 (4%)
35	Other	2 (10%)	6 (33%)	2 (25%)	5 (25%)	4 (36%)	1 (25%)	2 (50%)	1 (20%)		23 (24%)
Total		108	126	52	75	49	21	37	13	20	501

Table 6: Overview of Arguments used by Stakeholders by Stakeholder Groups contra Impairment-only Approach / pro Amortisation

Table 7

Overview of Arguments used by Stakeholders by Country, Region and Accounting System contra Impairment-only Approach/pro Amortization

	No.	Contra impairment-only approach	France	Germany	United Kingdom	Total EU	Total Europe	Non-European	British-American Model	Continental Model	Total
Usefulness Criteria		***Relevance Criteria***									
	11	IoA does not provide useful information - impairment charges come too late	3 (43%)	2 (22%)	3 (21%)	10 (27%)	15 (31%)	8 (17%)	5 (13%)	9 (27%)	23 (24%)
	12	Information of IoA is not used by users	3 (43%)	1 (11%)	3 (21%)	9 (24%)	10 (20%)	4 (8%)	5 (13%)	7 (21%)	14 (14%)
	13	IoA leads to recognition of internally generated goodwill	4 (57%)	5 (56%)	4 (29%)	17 (46%)	23 (47%)	19 (40%)	11 (29%)	17 (52%)	42 (43%)
	14	No impairment losses are recognized because of test on high CGU-level	1 (14%)	1 (11%)	3 (21%)	8 (22%)	10 (20%)	5 (10%)	7 (18%)	7 (21%)	15 (15%)
	15	Goodwill is tested on CGUs that are subject to restructuring - Disconnection between what has been bought and what is tested	2 (29%)			4 (11%)	7 (14%)	3 (6%)		6 (18%)	10 (10%)
		Stewardship/Accountability									
	16	Amortisation means greater accountability	1 (14%)	1 (11%)	3 (21%)	6 (16%)	6 (12%)	3 (6%)	4 (11%)	4 (12%)	9 (9%)
		Disclosures									
	17	Insufficient/Inappropriate/non-entity-specific/redundant/unnecessary disclosures	4 (57%)	1 (11%)	2 (14%)	8 (22%)	13 (27%)	16 (33%)	8 (21%)	8 (24%)	29 (30%)
		Faithful Respresentation Criteria									
	18	Amortization over useful life reflects consumption of goodwill more representationally faithful than IoA	2 (29%)	4 (44%)	1 (7%)	11 (30%)	16 (33%)	10 (21%)	5 (13%)	16 (48%)	26 (27%)
	19	Amortization is well-understood and well-established in practice and leads to consistent application		1 (11%)	2 (14%)	4 (11%)	5 (10%)	5 (10%)	5 (13%)	3 (9%)	10 (10%)
	20	Goodwill is an asset with limited useful life	4 (57%)	2 (22%)	2 (14%)	12 (32%)	16 (33%)	6 (13%)	5 (13%)	12 (36%)	22 (23%)
	21	IoA reduces comparability between organically and anorganically grown companies		2 (22%)	1 (7%)	5 (14%)	7 (14%)	1 (2%)	1 (3%)	5 (15%)	8 (8%)
		Operational and rigour									
	22	High judgment and managerial discretion regarding estimates and assumptions	3 (43%)	6 (67%)	5 (36%)	20 (54%)	27 (55%)	26 (54%)	17 (45%)	20 (61%)	53 (55%)
	23	Managerial discretion in identification and restructuring of and goodwill allocation to CGUs	2 (29%)	3 (33%)	5 (36%)	12 (32%)	17 (35%)	19 (40%)	10 (26%)	11 (33%)	36 (37%)
	24	Impairment testing is a complex exercise	1 (14%)	5 (56%)	3 (21%)	12 (32%)	16 (33%)	17 (35%)	9 (24%)	12 (36%)	33 (34%)
	25	Goowill impairment is difficult in presence of non-controlling interests	4 (57%)	1 (11%)	1 (7%)	6 (16%)	7 (14%)	4 (8%)	1 (3%)	5 (15%)	11 (11%)
	26	Valuation concept value in use has shortcomings		2 (22%)	6 (43%)	11 (30%)	16 (33%)	10 (21%)	11 (29%)	7 (21%)	26 (27%)
	27	Valuation concept fair value less costs of disposal has shortcomings		1 (11%)	2 (14%)	3 (8%)	5 (10%)	2 (4%)	4 (11%)	1 (3%)	7 (7%)
		Disclosures									
	28	Compliance with disclosure requirements is not fulfilled			2 (14%)	2 (5%)	3 (6%)	4 (8%)	4 (11%)		7 (7%)
Cost Constraint on Useful Financial Reporting											
	29	Impairment test is costly and time-consuming	4 (57%)	5 (56%)	8 (57%)	21 (57%)	27 (55%)	21 (44%)	17 (45%)	19 (58%)	48 (49%)
Other Criteria											
	30	Information of IoA is not used by the preparer's management		1 (11%)	5 (36%)	8 (22%)	13 (27%)	2 (4%)	6 (16%)	6 (18%)	15 (15%)
	31	Amortization reduces pressure on identification of intangibles in PPA and determination between asset acquisitions and business	1 (14%)	1 (11%)		3 (8%)	5 (10%)	7 (15%)	1 (3%)	5 (15%)	12 (12%)
	32	IoA is pro-cyclical when performance is low		3 (33%)		5 (14%)	7 (14%)	2 (4%)		7 (21%)	9 (9%)
	33	IoA increases volatility of profit and loss	2 (29%)	1 (11%)	2 (14%)	5 (14%)	7 (14%)	2 (4%)	2 (5%)	4 (12%)	9 (9%)
	34	Other reporting regimes allow amortization	1 (14%)	1 (11%)		2 (5%)	2 (4%)	2 (4%)		2 (6%)	4 (4%)
	35	Other	2 (29%)	2 (22%)	3 (21%)	11 (30%)	16 (33%)	7 (15%)	5 (13%)	12 (36%)	23 (24%)
Total			44	52	66	215	296	205	143	205	501

Table 7: Overview of Arguments used by Stakeholders by Country, Region and Accounting System contra Impairment-only Approach / pro Amortisation

Arguments related to *Relevance* have been cited 142 times. 14 (14% of total) respondents claim that the information provided by the impairment-only approach would not be used by the users of financial reporting. Similarly, 23 (24%) of the comment letters contain the complaint that the impairment-only approach does not provide useful information, in particular because of impairment charges being recognized too late. Importantly, this argument has been used by all financial analysts that submitted a response. Although this does not necessarily mean that impairment information is not relevant at all, the Chairman of the IASB, Hans Hoogervorst, recently also explicitly acknowledged problems with the timeliness of goodwill impairments (see footnote 2). Thus, the fact that share prices reflect the information before financial statements do is already under consideration by the standard setter. The claims that the information is not useful and not used by users of financial reporting in practice are consistent with the weak interest in the subject expressed by the low participation of financial analysts. Moreover, they are in direct opposition to the arguments brought forward by some of the supporters of the impairment-only approach that claim that it provides more useful information than amortization which illustrates the controversial nature of the issue.

The notion that the impairment-only approach leads, in fact, to the recognition of internally-generated goodwill and the resulting inconsistency with the provisions of IAS 38 *Intangible Assets* has been emphasized by 42 (43% of total) respondents. While the IASB was aware of this issue in 2004, the high number of mentions indicates that this inconsistency is still important to stakeholders. 71% of the members of the accounting profession, 56% of the standard setters (56%), and 75% of the financial institutions cited this argument. Another argument which has been discussed in 2004 refers to the high levels on which cash-generating units (CGUs) would be defined and, thus, would prevent impairments from being recognized. This argument has been brought forward by 15 respondents during the PIR.

From a stewardship perspective, 9 (9% of total) stakeholders that submitted comment letters favor amortization. Considering the slightly larger number of 15 (15%) of respondents that prefer the impairment-only approach regarding this discipline, the controversy becomes visible again. With regard to disclosures, much criticism has been addressed. 29 (30%) of the respondents complain about the current disclosure requirements accompanying the impairment test. This includes stakeholders that are not satisfied with the amount of disclosures required, whether insufficient or unnecessary, the non-entity-specific nature or the inappropriateness of the current requirements. Thus, the criticism about the disclosure requirements clearly outweighs the perceived benefits.

The arguments related to *Faithful Representation* contain conceptual and practical considerations as well as arguments related to the rigor and operability of the impairment test. More than a fourth of the respondents (26, 27% of total) argue generally that the amortization of goodwill over its useful life would reflect the consumption of goodwill more representationally faithful than the information provided by the impairment-only approach. Moreover, 10 (10%) stakeholders emphasize that amortization is well-understood and well-established in practice and, thus, leading to more consistent application.

From a conceptual viewpoint, a considerable number of stakeholders (22 respondents, 23% of total) highlight the fact that goodwill is an asset with a limited useful life and should be amortized. These views include respondents that claim to be able to estimate the useful life of goodwill, e.g. because an acquirer should have expectations about over which horizon it would realize synergies, as well as stakeholders that point out that estimations are inherent to accounting and, thus, not limited to the useful life of goodwill. In particular, those parties arguing that it is possible to estimate the useful life of goodwill are in direct opposition to one of the main arguments for the impairment-only approach which is the notion that any amortization period and pattern would be arbitrary. Moreover, few stakeholders argue that the current accounting model reduces the comparability between firms growing organically and anorganically (8, 8%). Some comment letters (7, 7%), none of which stems from a preparer or user, contain complaints about the compliance with the disclosure requirements, an argument which is not only related to the current provisions, but mainly to the institutional environment.

One third (166 arguments) of all arguments used against the impairment-only approach are assigned to the subcategory *Operational and Rigor*. Overall, this is consistent with our overall assessment regarding *RQ2* above and shows the serious concerns of the stakeholders about the current impairment test provisions. The most widely shared argument concerns the high judgment and managerial discretion that is involved in impairment testing, especially with regard to estimates and assumptions, such as discount rates or cash flow forecasts. More than half of the respondents (53, 55%) emphasize this issue and point to problems related to objectivity and verifiability, such as the opportunity to manage earnings via the delay of impairment charges. Moreover, the managerial discretion involved in the identification and restructuring of as well as the allocation of goodwill to CGUs is subject to criticism by 36 (37%) respondents. The two arguments regarding the discretion involved have been used to far larger extent by the accounting profession, standard setters and regulators than by preparers with the notable exception of financial institutions. For example, while 7 (88%) of the regulators, 14 (78%) of the standard setters, and 13 (62%) of the members of the accounting profession complain about the high judgment and managerial discretion that is involved in impairment testing, only about 35% of all non-financial corporations including their trade associations do so. This indicates that external parties having to rely on or verify the information provided are more critical than preparers that are in the position to use discretion themselves.

Additionally, 33 (34%) respondents acknowledge that the impairment test is a complex and challenging exercise which raises doubts about its operability. In addition, it is noteworthy that one of the valuation concepts to measure the recoverable amount according to IAS 36, the "value in use" (ViU), has been criticized by 26 (27%) respondents and, thus, seems to be far less accepted than the "fair value less cost of disposal" (FVLCOD). Respondents complaining about the valuation concepts often also view the respective concept as a source of complexity.

In accordance with the practical considerations described above, *Cost Considerations* play an important role in the argumentation against the impairment-only approach. 48 (49% of total) stakeholders that submitted a comment letter during the PIR highlighted that the impairment test procedures are costly and time-consuming. Comparing the impairment test provisions to the requirements of the amortization approach, the higher level of efforts needed for the current goodwill accounting model are obvious. The high number of stakeholders mentioning cost and cost-benefit arguments against the impairment-only approach is consistent with the high number of responses highlighting the complexity of the impairment rules which can be assumed to be the source of the higher burden. The analysis by stakeholder interest group shows that especially non-financial corporations' trade associations (91%) and financial institutions (100%) are critical of the cost of annual impairment testing, while no stakeholder from the classical user group of financial analysts cited cost arguments.

Arguments that are not related to the usefulness of financial reporting or the cost constraint on useful financial reporting have been used 72 times against the impairment-only approach. The most cited argument in this category (15 responses, 15% of total) was the notion that the management of the reporting company would not use the information provided under the current model for internal purposes and consequently, the impairment test would be a mere accounting exercise. In particular, this has been addressed by non-financial corporations (30% of the members of this stakeholder group). Further, 12 (12%) respondents pointed out that regular amortization would reduce the pressure on the identification of intangible assets during the initial purchase price allocation as well as on the differentiation between asset acquisitions and business combinations, two topics of the RfI that are related to the one under consideration in this paper. The argument that the impairment-only approach would lead to a "negative spiral" when the performance of the reporting firm is low and the claim that the current provisions increase the volatility of profit or loss have each been cited by 9 (9%) respondents. 4 (4%) respondents referred to other accounting regimes that allow goodwill to be amortized in order to argue that amortization is the desirable method. This also includes one reference to the IFRS for SMEs for which the IASB itself chose regular amortization rather than the impairment-only approach.

Taking everything into consideration, it can be concluded that the views on the usefulness of the impairment-only approach compared to amortization are mixed (*RQ1*) and that both views are supported by a number of arguments that directly oppose each other in some areas. With regard to *RQ2*, the opinion that the impairment test is not rigorous and operational devised prevails among constituents that expressed a clear view. With regard to the rigorousness and operability, arguments related to the discretion as well as the complexity involved in the impairment tests are used extensively. Slight differences in the use of arguments can be observed between interest groups while the differentiation by accounting system provides the most interesting insights regarding geographical differences on the overall level. It is further noteworthy, that academics form the interest group that provided the smallest number of arguments illustrating the low contribution of this group to the PIR via comment letters.

Recommendations of Alternative Methods

Regarding the way forward, some constituents also explicitly recommend an accounting treatment for acquired goodwill (see Table 8 for an overview). The majority of recommendations include the reintroduction of amortization (16, 16% of total responses) and the implementation of an amortization approach with impairment tests whenever impairment indicators are present (13, 13%). Together, almost a third of the respondents recommended a return to the amortization regime. Only four preparers proposed other alternatives, such as the direct charging of goodwill to equity or amortization to other comprehensive income instead of profit or loss, while in 64 (66%) of cases, no alternative was explicitly recommended. This shows that the method of directly writing-off goodwill to equity seems not to be advocated by a considerable number of stakeholders anymore and the methods to be discussed seem to be reduced to the impairment-only approach and regular amortization (with indicator-based impairment tests). Some constituents did not express strong views on the issues analyzed above, but rather emphasized the fact that the FASB is currently debating on similar issues and any effort to enhance goodwill accounting should be conducted in collaboration between the IASB and the FASB in order to ensure international convergence.

Table 8

Overview of Alternative Methods Recommended by Stakeholder Groups

Accounting Treatment for Goodwill	Accounting Profession	Standard Setters	Regulators	Non-Finl Corporations	Non-Finl Corp Trade Assns	Financial Analysts	Financial Institutions	Academics	Others	Total
Amortization		2		7	2	1	1	2	1	16
Amortization and trigger-based impairment tests	4	2	2	1	2		2			13
Other				2	1		1			4
No alternative accounting method recommended	17	14	6	10	6	3		3	5	64
Total	21	18	8	20	11	4	4	5	6	97

Table 8: Overview of Alternative Methods Recommended by Stakeholder Groups

4 Researchers' Findings regarding Goodwill Impairment

4.1 Research Approach: Literature Review

The IASB notes that research evidence supports its view taken when implementing the impairment-only approach (IFRS 3 (2004).BC140). In the following, we review the Board's assessment by considering the research conducted. We follow a twofold approach to identify academic research that is relevant to our research question. First, we screen all individual issues of the highest-ranked academic accounting journals[31] from 2000 until today.[32] In a second step, we go through the references of the relevant journal articles identified. Overall, we identified 31 studies that are relevant to our research question.[33] In the following, we arrange the literature around the overarching question regarding the usefulness of the impairment-only approach and highlight the relationships to the arguments identified in our comment letter analysis above in order to validate the stakeholders' views and identify avenues for future development. Figure 2 provides an overview regarding the allocation of arguments used by stakeholders to the topics of academic studies.

[31] We are relying on the journal rankings of the *Association of Business Schools* (ABS) (2010) and the *German Academic Association for Business Research* (VHB) (2011) as well as on the *Excellence in Research for Australia* (ERA) (2010) ranking and perform our detailed approach for all accounting-related journals that are ranked in the two highest categories, respectively (see also Appendix 3 – Panel A).

[32] To complement the articles identified, we further use the search functions on the journals' websites. We employ the following search terms: 'Goodwill', 'Impairment', 'Impairment-only', 'IFRS 3', 'IAS 36', 'SFAS 141', 'SFAS 142', 'SFAS 144'.

[33] For a comprehensive literature review on goodwill accounting beyond the subsequent measurement of acquired goodwill we refer to Boennen and Glaum (2014).

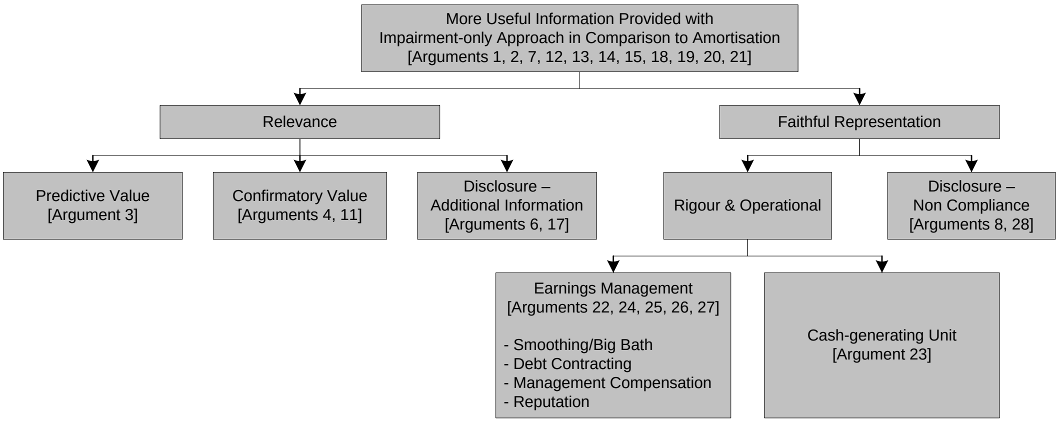


Figure 2: Framework of recent research related to subsequent goodwill accounting

4.2 Results of Literature Review

In the literature review, we focus primarily on empirical studies which examine goodwill accounting under the IFRS accounting regime. This is due to the fact that the research question directly relates to IFRS 3 and IAS 36. Nevertheless, we also consider studies which are based on US GAAP settings for several reasons. First, there are only a limited number of IFRS-studies available. Second, the proximity regarding the information content provided by goodwill impairments according to IAS 36 and SFAS 142, respectively, is obvious. Finally, both regimes prescribe impairment-only models.[34] The results presented in this chapter are subject to limitations and therefore should be considered with caution: Most of the studies consider the capital markets of Australia, Europe and the US and thus evidence from other regions and markets is rare. In addition, some studies have small sample sizes and/or out-dated data and provide hardly any generally applicable, verifiable statements. Third, for the studies conducted in the US and Europe a comparison of the situation of amortization of goodwill and the impairment-only regime is problematic, because companies were allowed to set off goodwill

[34] The proximity between IFRS and US GAAP regarding the accounting for goodwill is also expressed by the FASB which deferred further actions on its project on "Accounting for Goodwill for Public Business Entities and Not-for-Profits" until the IASB published its findings on the PIR on IFRS 3 (FASB, 2014).

against equity in the past (Boennen & Glaum, 2014). Finally, although we are convinced of providing a representative overview of the research evidence to date, we do not claim our findings to be the results of a full review.

Usefulness of Impairment-only Approach in Comparison to Amortization

One of the most prominent questions raised in the PIR relates to the usefulness of the impairment-only approach. On the one hand, the proponents claim that more useful information will be provided by the impairment-only approach compared to amortization (Argument 1, 14 mentions) and information about amortization is of no significant value to users (Argument 2, 4 mentions). On the other hand, the opponents retort that the information generated by non-amortization is not useful (Argument 11, 23 mentions) and impairment information is not used by users (Argument 12, 14 mentions).

To address this question, researchers especially conducted value relevance studies which generally jointly test relevance and reliability (Barth et al., 2001).[35] These studies provide indirect evidence of the usefulness of information and investigate whether there is a significant correlation between the goodwill recognized and share prices (Boennen & Glaum, 2014). All value relevance studies reviewed find an increase in value relevance following the implementation of the impairment-only approach in comparison to amortization (Chalmers et al., 2008; Aharony et al., 2010; Horton & Serafeim, 2010; Oliveira et al., 2010). Hence, the authors generally conclude that the impairment-only approach provides more useful information to users than amortization. Following a different approach, Moehrle et al. (2001) find evidence that amortization is of no significant value to users and

[35] Although the characteristics of useful financial reporting have been amended with the Conceptual Framework for financial reporting, we assume this observation to hold for relevance and faithful representation in the meaning of the current Conceptual Framework as well.

thus provide support for the impairment-only approach. Comparing the information content from earnings before amortization and earnings before extraordinary items, the authors find that these measures do not differ significantly. Therefore they conclude that goodwill amortization amounts are not decision-useful.

Furthermore, some stakeholders claim that amortization is an arbitrary estimate of the consumption of acquired goodwill (Argument 7, 20 mentions), whereas others argue that amortization would more representationally faithful reflect the consumption of goodwill (Argument 18, 26 mentions). The results of the study by Chalmers et al. (2011) support the proponents of the impairment-only approach. Based on an Australian sample, the authors find that the goodwill impairment according to IFRS (2006-2008) is more closely aligned with companies' investment opportunities than under the Australian GAAP amortization regime (1999-2005). Therefore, the authors state that "impairment charges better reflect the underlying economic attributes of goodwill than do amortization charges".

Overall, the results of the empirical studies indicate that the implementation of the impairment-only approach has enhanced the usefulness of financial statements in comparison to amortization. For an overview of the studies see Appendix 3 – Panel B.

Relevance: Predictive value

To be useful, information has to be relevant; i.e. it has to have predictive or confirmatory value or both in order to be able to make a difference in the decisions made by users (Conceptual Framework, QC6-7). Information has predictive value "if it can be used as an input to processes employed by users to predict future outcomes" (Conceptual Framework, QC8). Stakeholders in favor of the impairment-only approach argue that this method brings new information to the market, in particular private information from management, and therefore has a signaling effect (Argument 3, 3 mentions). The predictive value of goodwill information and, thus, the implementation of the impairment-only approach have been investigated by several studies, especially with regard to the influence on earnings and cash flow forecasts.

Hamberg et al. (2011) investigate the adoption of IFRS in Sweden and the stock market's reaction to increased earnings following the abolishment of goodwill amortization (goodwill charges are lower under IFRS than under Swedish GAAP). The authors conclude that investors seem to view the increase in earnings as an indication of higher future cash flows. Chalmers et al. (2012) examine whether the adoption of IFRS has influenced the association between intangible assets, including goodwill, and the accuracy and dispersion of analysts' earnings forecast. The authors find that the associations between the magnitude and the dispersion of analyst forecast errors and reported intangible assets have become more negative after the introduction of IFRS. According to the authors, this improvement could be traced back to the implementation of the impairment-only approach.

In the context of US GAAP, Jarva (2009) finds that goodwill impairments under SFAS 142 are associated with future expected cash flows. The author shows that goodwill impairments have a significant predictive ability for expected one- and two-year-ahead cash flows. Lee (2011) finds that the ability of goodwill to predict future cash flows has improved since the introduction of SFAS 142 in 2001 and concludes that the results support the view taken by the FASB and proponents of SFAS 142. Zang (2008) shows that a larger reported goodwill impairment charge than expected provides value-relevant information. Therefore, unexpected impairment charges signal negative future profit-making potential. Hence, stock prices are affected by material changes of the forecasts of future cash flows by investors and analysts revising earnings forecasts downwards. Similarly, Li et al. (2011) find that the market revises its expectations about future earnings downwards on the announcement of a goodwill impairment charge. In addition, the authors show that impairment charges are significantly negatively correlated with sales growth and growth in operating income in the subsequent two years and, thus, appear to be a leading indicator regarding declines in future profitability.

Regarding the relevance and timeliness of goodwill write-offs, results are mixed. While Chen et al. (2008) find that SFAS 142 provides new information to the capital market and timeliness has been be improved, Bens et al. (2011) show that the information content of goodwill impairment decreased after adoption of SFAS 142.

Relevance: Confirmatory value

Information has confirmatory value if it provides users feedback about previous evaluations (Conceptual Framework, QC9). Some stakeholders argue that the results of the impairment-only approach are relevant and confirm economic phenomena (Argument 4, 16 mentions). On the contrary, others stress the fact that impairment charges are delayed, provide little new information and are already reflected in share prices (Argument 11, 23 mentions).

Hayn and Hughes (2006) conduct a study based on goodwill generated before the introduction of SFAS 142. They find that goodwill impairments lag behind the economic deterioration of goodwill by an average of three to four years. The authors suggest (based on sensitivity tests on a smaller sample) that the results are also transferable to the accounting requirements of SFAS 142, i.e. the impairment-only approach. Although Jarva (2009) provides evidence that impairment charges according to SFAS 142 are associated with future cash flows, the author also finds indications that goodwill impairment charges lag behind the economic deterioration of goodwill. Li and Sloan (2014) investigate the timeliness of goodwill impairments in the periods before and after the implementation of SFAS 142. The authors' findings indicate that goodwill write-offs are relatively less timely after the introduction of SFAS 142 because managers would wait until there is convincing evidence that the fair value of goodwill is lower than its carrying amount. According to the authors, this result is not consistent with the FASB's goal that the impairment-only approach better reflects the underlying economics of goodwill.

Disclosures

Proponents of the impairment-only approach contend that the information provided in the notes is beneficial and relevant to users (Argument 6, 9 mentions). By contrast, the opponents of the current rules argue that the disclosures are insufficient, inappropriate, non entity-specific and therefore overall non-informative (Argument 17, 29 mentions).

The review team of the UK Financial Reporting Council (2008) examined the December 2007 annual reports of UK companies which had reported significant amounts of goodwill on their balance sheets. Regarding the disclosures presented by the 32 companies, the review team assessed 17 reports as "rather uninformative", 9 as "useful" and 6 as "very useful". The European Securities and Markets Authority (ESMA) (2013) evaluated the disclosures in the 2011 IFRS financial statements of companies with significant amounts of goodwill as well. Regarding the disclosures, the regulator observed that "in many cases these were of a boilerplate nature and not entity-specific". Only 60% of the issuers provided information regarding key assumptions beyond the discount rate and growth rate.

Overall, the empirical studies regarding relevance indicate that the predictive value and information content of goodwill accounting have increased since the introduction of the impairment-only approach. Nevertheless, in line with the perceptions of stakeholders, there is evidence that goodwill impairment charges lag behind the economic phenomena which can at least partly be attributed to the fact that financial statements are issued after the reporting period. However, this does not necessarily mean that the information provided by the impairment-only approach is not useful at all. For example, impairment charges can still add to relevance because of having confirmatory value. Regarding the disclosure requirements, studies show that they are partly uninformative which is consistent to the perceptions expressed by respondents to the RfI (see Appendix 3 – Panel C for studies regarding relevance).

Faithful Representation

To be useful, financial statements must not only represent relevant phenomena, but they must also faithfully represent the phenomena that they purport to represent. In the course of a perfectly faithful representation the presented information will be complete, neutral and free from error (Conceptual Framework, QC12).

The rules for goodwill accounting are said to allow managers a wide scope for discretion (see the results of our comment letter analysis above). On the one hand, managers could use the discretion inherent in the rules for impairment of assets to convey private information about future cash flows (so-called "white earnings management" by Ronen & Yaari, 2008). On the other hand, managers could exercise the discretion opportunistically (so-called "gray earnings management" by

Ronen & Yaari, 2008) to "mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting numbers" (Healy & Wahlen, 1999). The earnings management literature can be roughly divided into four different groups (see Boennen & Glaum, 2014):

- *Income smoothing, big bath accounting.* The management could consider income smoothing by recognizing impairment charges to reduce earnings fluctuation. The reason behind this is that income smoothing leads to lower shareholders' volatility estimates which is associated with a reduced bankruptcy risk and an increased stock price (Trueman & Titman, 1988). Big bath accounting considers management's decision to realize a huge one-time impairment charge in a period in which earnings are unexpectedly low. Advantages that are seen in the recognition of a large write-off are to signal that past problems have been addressed and that a one-time impairment charge ensures high returns for future periods (Strong & Meyer, 1987). Moreover,a further worsening and current bad performance may have only limited additional impact (Walsh et al., 1991).
- *Debt contracting.* Companies use earnings management if they may violate debt covenants in case they consider a material goodwill impairment charge.
- *Management compensation.* Managers may use the discretion offered by the impairment test not only for their companies' benefit, but also for their private gain. Accordingly, managers may have the intention to avoid or delay goodwill impairment charges to protect their personal income.

- *Management reputation*. Managers may have incentives to use earnings management if the impairment of goodwill has a potential effect on managers' reputation.

Many stakeholders claimed in their comment letters that the impairment test generates a wide range of acceptable results because of the inherent managerial discretion and subjectivity. Therefore, management has opportunities to conduct earnings management which reduces the reliability of the impairment-only approach (in particular Argument 22, 53 mentions).

The empirical study by Siggelkow and Zuelch (2013) analyses the drivers of fixed assets write-off decisions and the respective magnitude of companies in the EU. The authors find that write-offs do not exclusively reflect economic declines in asset values, but are rather used to manage earnings. In particular, their findings provide support for big bath accounting and income smoothing. Chao and Horng (2013) examine whether managers use discretionary write-offs and abnormal accruals jointly to reach earnings targets. The authors observe that discretionary write-offs and discretionary accruals are partial complements for earnings manipulation which is in contrast to the assumption that managers use their discretion to signal economic realities. Van de Poel et al. (2009) show that companies are more likely to take impairment charges of goodwill when earnings are unexpectedly high (earnings smoothing) or unexpectedly low (big bath).

Beatty and Weber (2006) argue that companies have motives to delay goodwill impairments. In the course of their study, the authors show that debt-covenant concerns mitigate the likelihood of goodwill impairments. For a sample of companies with market indications of goodwill impairment, Ramanna and Watts (2012) find that the frequency of goodwill non-impairment is 69%. The authors interpret this as evidence for an association between goodwill non-impairment and debt-covenant violation concerns.

Darrough et al. (2014) investigate whether compensation committees consider goodwill impairment charges for CEO compensation. The authors show that there is a significant reduction in cash- and option-based CEO compensation after companies have recognized goodwill write-offs. Lapointe-Antunes et al. (2008) examine the reporting incentives and constraints associated with the magnitude of transitional goodwill write-offs in the course of the implementation of SFAS 142 / Section 3062 of the Canadian Institute of Chartered Accountants' Handbook in Canada. The authors find that firms record lower impairment charges when top executives have sizable unrealized gains on exercisable stock options. Furthermore, the studies by Beatty and Weber (2006) and Ramanna and Watts (2012) show that the probability of firms to encounter goodwill impairments is lower if their CEO's compensation includes a cash bonus.

Masters-Stout et al. (2008) investigate the tenure of the CEOs and their corresponding goodwill impairment decisions. Their hypothesis is that new CEOs recognize impairments in the early years of their tenure, because they were not involved in former acquisition decisions and hence do not suffer reputational costs from the impairments. Furthermore, they have an incentive to reduce the amount of goodwill on the balance sheet in order to decrease the probability of impairments in future years, which could then affect their own reputation negatively. The authors find compelling evidence that new CEOs impair more goodwill than their senior counterparts. The study by AbuGazaleh et al. (2011) also examines mangers' use of discretion in determining goodwill write-offs. The authors find that goodwill impairment losses are more likely to be associated with recent CEO changes and thus infer that managers use discretion in the course of goodwill impairment tests. Similarly, other empirical studies (Beatty & Weber, 2006; Zang, 2008; Hamberg et al., 2011; Ramanna & Watts, 2012) show the association between CEO tenure and goodwill impairment charges.

Based on the empirical results regarding earnings management and goodwill impairment testing it seems that the negative side of discretion dominates the application of the accounting requirements (see for an overview Appendix 3 – Panel D). Nevertheless, there is also some minor support for the assumption of "white earnings management" (Ronen & Yaari, 2008). In particular, Jarva (2009) finds no convincing evidence that firms of his sample opportunistically avoid impairments. This result is confirmed by Lee (2011). However, on balance, it can be concluded that researchers provided convincing evidence that "gray earnings management" in the course of goodwill accounting is a serious issue.

Cash-generating Units (CGUs)

Stakeholders also presented the argument that there is too much managerial discretion regarding the identification of CGUs and the allocation and reallocation of goodwill and thus the level (CGU) on which the impairment test will be carried out (Argument 23, 36 mentions). In this sense, Ramanna and Watts (2012) argue that managers may attempt to allocate goodwill to units that are rich in internally generated goodwill, because these would provide a buffer against future goodwill impairments.

According to the literature, there is a discussion on whether the allocation of goodwill to a smaller or a larger number of CGUs helps to prevent an impairment charge (Boennen & Glaum, 2014). Beatty and Weber (2006) and Ramanna and Watts (2012) posit that a larger number of units would give managers more possibilities to allocate goodwill and thus discretion to prevent impairment charges. Both studies find indications that a larger number of reporting segments (as proxy for the number of CGUs) is associated with a lower frequency of goodwill write-offs. On the other hand, it could be claimed that a smaller number of units implicates that, under ceteris paribus conditions, each unit is larger and therefore the likelihood of an impairment decreases (Boennen & Glaum, 2014). In line with the latter reasoning, Lapointe-Antunes et al. (2008) show that the number of segments is positively associated with the probability of goodwill write-offs. This indication is confirmed by studies which consider the voluntary disclosures of companies or survey results. Duff & Phelps (2013) conduct a survey study in the US among members of Financial Executives International, an organization for senior-level financial executives. The study reveals that two-thirds of the public companies have five or less reporting units, while only 20% of the public companies indicated that they have more than ten reporting units. Glaum and Wyrwa (2011) provide a detailed assessment of disclosures of IFRS financial statements with regard to the impairment of goodwill. Examining how goodwill is allocated to CGUs, the authors' findings indicate that companies concentrate goodwill in a small number of CGUs (see Appendix 3 – Panel E).

Based on the state of current academic research, there is no compelling evidence regarding an abuse of managerial discretion in the course of the identification of CGUs and of the allocation of goodwill to manipulate the results of an impairment test. Moreover, there is no consensus on the prevailing approach to allocate goodwill to CGUs, if the avoidance of goodwill impairments is the desired outcome.

Disclosures – Non compliance

In their comment letters, some stakeholders mentioned that the reliability of the information provided by the impairment-only approach has been improved or ensured by disclosures (Argument 8, 10 mentions), whereas others criticized that preparers do not fulfil the disclosure requirements of the impairment test (Argument 28, 7 mentions). Based on a European sample, a study conducted by Glaum et al. (2013) shows substantial non-compliance with the disclosure requirements of the provisions of IAS 36 for the year 2005. In addition, Carlin and Finch (2010) investigate the goodwill reporting practices of Australian companies. The authors find evidence of continued high levels of non-compliance with the accounting standard over the first two years of IFRS adoption (2006-2007). The non-compliance documented appears not to be a consequence of random errors, but rather seems to be associated with both, managerial and firm-level incentives as well as the strength of national enforcement systems (Boennen & Glaum, 2014). Appendix 3 - Panel F provides an overview of the respective research findings.

5 Discussion and Avenues for Future Development

The main reason for the introduction of the impairment-only approach was the expectation that it provides more useful information in comparison to amortization (IASB, 2014c). Accordingly, our first research question, *RQ1*, focused on the usefulness of the two alternatives. The perceptions of stakeholders as expressed in the PIR are almost perfectly balanced and seem to be related to the respondents' national accounting system. In the light of these mixed views, our finding that academic research tends to support the assumption of a higher usefulness of the impairment-only approach is noteworthy. In particular, the fact that no study reviewed argues for a higher usefulness of amortization suggests the introduction of the impairment-only approach did not worsen financial reporting quality. Concluding, an immediate withdrawal of the current concept and a return to the former amortization approach (as explicitly advocated by almost 30% of the stakeholders) is not advisable. However, our results show that substantial parts of the IFRS community doubt the usefulness of the impairment-only approach. In addition, the FASB has also started to reexamine the issue. Altogether, in the long-term, the IASB should initiate a comprehensive project to discuss the subsequent treatment of goodwill holistically. To ensure international convergence, this should be done in cooperation with the FASB.

As a condition for the impairment-only approach providing better information than amortization, the impairment test employed has to be rigorous and operational devised. Our second research question, *RQ2*, focused on whether stakeholders perceive the current impairment test as rigorous and operational. Our third research question, *RQ3,* aimed at deriving insights on the reasons why stakeholders prefer either of the methods in order to identify potential for improvement. Both, stakeholders' comments and researchers' findings indicate that the second research question cannot be answered positively. As the majority of stakeholders argue that the impairment test is not rigorous and operational devised, researcher provide convincing evidence that mangers use their discretion opportunistically ("gray earnings management"). In addition, stakeholders especially complained about the complexity of the accounting rules. Besides concerns about the rigorousness and operability, stakeholders widely emphasized that the impairment test procedures as currently required are costly and time-consuming. Taking all these issues into consideration, there seems to be a demand for improvement that we advise to address with short-term measures rather than in the course of the comprehensive long-term project on goodwill accounting. In the following, we suggest some avenues for future development of a more rigorous and operational impairment test with an improved cost-benefit relation that are also intended to enhance the acceptance of the impairment-only approach in the short-term.

Short-term Suggestions: Further Alignment with US GAAP Requirements

One short-term avenue for the future impairment test could be to further align the requirements with those under US GAAP which would also contribute to international convergence. This idea is also in line with the stakeholders that made reference to the current developments under US GAAP or emphasized that divergence should be avoided. Comparing the requirements of the two accounting regimes, we question whether the concept of the recoverable amount is necessary or a single valuation concept such as the fair value under US GAAP could be sufficient.

Our content analysis revealed that 26 (27%) of the stakeholders complained about the shortcomings of the valuation concept ViU, whereas only seven stakeholders explicitly mentioned the flaws of the valuation concept FVLCOD. One reason could be that stakeholders, especially following the introduction of IFRS 13 *Fair Value Measurement*, are more familiar with these requirements. Other reasons could be the adjustments that are necessary to calculate the ViU which make the calculations complex and deviating from the information used by the management, both arguments used by opponents to the impairment-only approach. The FVLCOD as the sole valuation concept of IAS 36 would also increase comparability between IFRS financial statements, because all preparers would have to apply the same concept to determine an impairment loss. Furthermore, establishing the FVLCOD as the sole valuation concept for impairment testing would align the valuation concepts applied more closely. Both, initial recognition in the course of the purchase price allocation and subsequent measurement would be based on fair value measurements.

The concept of the recoverable amount and the calculation of two values (FVLCOD and ViU) stems from the idea that the recoverable amount of an asset should reflect the likely behavior of rational managers (IAS 36.BCZ23). If an asset’s FVLCOD is higher than its ViU, a rational manager would dispose of the asset. In the opposite situation, it is rational to continue to use the asset within the company. The idea behind the concept of recoverable amount is clear and concise. However, after 10 years of application, some measures in accordance with the valuation concept ViU apparently do not work as intended by the IASB. In this regard, three aspects leading to the stakeholders’ perception seem most critical from a conceptual point of view: (1) No risk equivalence between discount rate and cash flows, (2) pre-tax concept and (3) cash flow projections. These aspects have already been discussed by the IASB in previous deliberations:

- Although ViU is a company-specific value, the IASB believed that a discount rate based on the company’s specific assessment could not be verified objectively. Therefore, the discount rate should reflect the market’s assessment (IAS 36.BCZ54), whereas the cash flows are based on companies assessments. In fact, there is no risk equivalence between cash flows and cost of capital.
- The IASB decided to exclude cash flows from future restructurings or from improving or enhancing the asset’s performance (IAS 36.33), to implement “safeguards” to limit the risk that a company may make an over-optimistic (pessimistic) estimate of the recoverable amount (IAS 36.BCZ24). The intention of this “safeguard” was to emphasize pru-

dence with regard to the projection of cash flows, but obviously caused serious side effects. Since companies usually consider future restructurings and expansion investments in their internal business plan projections, compliance with the impairment provisions requires to eliminate these cash flows again from the business plan, which is a complex and burdensome practice.

- Regarding the pre-tax concept of ViU, field visit participants and respondents to the Exposure Draft of December 2002 already stated that companies usually calculate post-tax cash flows and that using pre-tax cash flows and pre-tax discount rates would be a significant implementation issue (IAS 36.BC91). Although the IASB noted this argument, it concluded that this issues should be solved as a part of its conceptual project on measurement (IAS 36.BC93). To date, no progress has been made regarding this problem.

As the ViU is a valuation concept which is based on discounted cash flows, the IASB confirmed in 2008 that the FVLCOD could also be determined in this way. The IASB already acknowledged in 2004 that, with regard to the FVLCOD, it is unlikely that observable market prices exist for goodwill, most intangible assets and many items of property, plant and equipment (IAS 36.BCZ18). Consequently, most preparers carried out the calculation of FVLCOD with discounted cash flows. In response to this, and due to inconsistent requirements for disclosures, the IASB decided in the course of the *Annual Improvements to IFRSs 2008* to require the same disclosures for FVLCOD and ViU in case discounted cash flows are used to estimate the recoverable amount (IAS 36.BC209A). As both valuation concepts will in nearly all cases be calculated with discounted cash flows, it is questionable whether the IASB should stick to the ViU, even though ten years of experience show the drawbacks of the concept. For the few cases, in which the ViU seems to be the only reasonable method, IFRS preparers could learn from the experience of US GAAP accountants that are relying solely on fair value-based impairment tests.

One of the most frequently cited arguments of the stakeholders (48 mentions) refers to the costs of impairment testing. In 2011, the FASB implemented the so-called "step zero" (ASU 2011-08), which allows companies testing goodwill for impairment to assess qualitative factors in a first step, before performing the quantitative calculations. As a result, quantitative impairment tests do not have to be conducted, if the qualitative assessment ensures that the book value of goodwill is recoverable. To reduce costs while increasing convergence with US GAAP, the accounting requirements of IAS 36 could also consider a qualitative assessment of the impairment issues, comparable to the aforementioned "step zero". In fact, IAS 36.99 already contains similar rules stating that the most recent calculations made in former periods can be used in the current period, if specific conditions are met. Some stakeholders complaining about the efforts required while their impairment tests show significant "headroom" and a remote probability of impairment, expressed demand for such qualitative assessments. Insofar, applying IAS 36.99 in practice could already provide significant improvements of the cost-benefit conflict.

Many stakeholders perceive the disclosures of IAS 36 as not entity-specific and insufficient. Empirical studies confirm that disclosures are often uninformative. Therefore, the IASB should take the opportunity to revise the disclosures where necessary and give more guidance as to what it expects from preparers regarding the information provided. In this context, the standard setter has to balance the information needs of analysts with the refusal of preparers to disclose sensitive information. Finally, stakeholders mentioned that there is a need for more guidance regarding specific and complex issues. In particular, the consideration of corporate assets or the treatment of non-controlling interests are sources of complexity for which stakeholders seek more guidance from the IASB.

The avenues outlined above are relevant irrespective of the approach chosen for subsequent goodwill accounting. The IFRS need a methodology that is operational and rigor for testing assets for impairment at least in case of so-called triggering events, i.e. indicators that an asset is impaired. Although the conceptual question regarding the accounting for goodwill will take a longer time to be resolved, the PIR on IFRS 3 provides the opportunity to improve the present accounting rules of IAS 36.

6 Conclusion

The subsequent accounting for goodwill has long been a topic of debate. The current stage, non-amortization with regular and indicator-based impairment tests has been entered into the early 2000s, when the FASB and the IASB introduced the impairment-only approach as part of their respective business combinations projects. Ten years after the issuance of IFRS 3 (2004), the IASB is conducting its PIR on the business combinations standard. In this context, the current accounting model for goodwill is challenged in the light of the experience which has been made with the provisions. In this paper, we examine the effects of the introduction of the impairment-only approach from two perspectives, namely stakeholders of the IFRS community, and academics.

Our content analysis of the comment letters submitted in response to the formal RfI of the PIR shows that stakeholders' views are mixed regarding the usefulness of the information provided by the impairment-only approach compared to amortization. Conspicuously, respondents from countries with a Continental (European) accounting system do not perceive the information to be of higher usefulness than regular amortization expenses. Contrary, respondents from countries with a British-American accounting system, especially from the UK, support the current accounting model and attribute high usefulness to the impairment-only regime. This indicates that differences in the perceptions of stakeholders due to their origin remain even after a decade of shared accounting practice. With regard to the impairment test, our analysis shows that stakeholders that express a clear view by majority raise concerns about the impairment test not being rigor and operational devised.

Our analysis of the arguments brought forward in the comment letters in favor of or against the impairment-only approach or amortization sheds light on the reasons for the preferences of the stakeholders. While supporters of the current provisions mostly emphasize the relevance of the information provided and argue that amortization would be an arbitrary estimate of the consumption of goodwill, the opponents particularly complain about the high subjectivity and discretion inherent in the impairment test as well as the high complexity and costs.

Having analyzed the perceptions of stakeholders, we review related academic research in order to validate the positions taken and arguments used by the stakeholders. On the one hand, researchers' findings tend to support the notion of impairment information being of higher usefulness as compared to regular amortization. On the other hand, however, researchers provide compelling evidence that managers use the discretion in the course of the impairment test opportunistically ("gray earnings management"). Taken together, our results regarding stakeholders' perceptions and researchers' findings let us advise the IASB not to withdraw the current concept immediately. Nevertheless, the controversial views should be taken to start a joint project with the FASB to review the subsequent accounting of goodwill holistically in order to enhance the global acceptance of IFRS.

To address the concerns expressed about the current impairment test in response to the RfI, we suggest some measures that could be implemented in the short-term. Our suggestions would additionally promote international convergence with US GAAP. First, the valuation concept ViU could be abolished to reduce complexity and managerial discretion. Second, emphasizing IAS 36.99 and promoting a qualitative assessment of impairment issues rather than performing yearly calculations could reduce the costs, in particular where there is significant "headroom" and little change in the economic environment. Finally, the IASB should review the disclosure requirements and provide more guidance regarding complex accounting issues involved.

Our findings are of interest to the financial reporting community as a whole. The subsequent accounting for goodwill has been a controversial issue for more than a century. Moreover, the amount of goodwill in a firm's balance sheet is often significant. Currently, our findings are of utmost interest to standard setters, especially the IASB and the FASB. The IASB receives a timely and comprehensive analysis from an independent institution that is not suffering from potential self-evaluation concerns in this context. Thus, our analysis may enable the IASB to enhance the credibility of their analysis and provides an additional perspective on the same information which may reveal supplementary insights, especially regarding the qualitative arguments used. The FASB, waiting for the IASB to conclude on the PIR on IFRS 3, will accordingly benefit from this paper. Moreover, our avenues for short-term improvements can be used as a starting point for the ongoing development of the accounting for goodwill under IFRS.

Besides the current standard setting debate, our paper should be of interest to researchers as it provides evidence that their research is, to a large extent, congruent to stakeholders' perceptions. This indicates that research topics are generally relevant and that proxies used in empirical studies are often valid constructs capturing what they are said to. Future research opportunities lie especially in accompanying the standard setters in a comprehensive project on goodwill accounting. Moreover, research could help to generate insights into the views of those parties that, traditionally, are not well-represented in public consultation processes. In particular, the information needs of capital providers with regard to subsequent goodwill accounting should be explored more deeply. Considering the high number of stakeholders criticizing the costs of impairment testing, future research should also identify the amount and sources of these costs (see also Boennen and Glaum, 2014).

Our paper is subject to certain limitations. Content analysis, although done by two researchers independently, remains subjective. Moreover, taking into account the detail and the number of the qualitative arguments, the lines between the categories are not clear-cut in every respect. Thus, we cannot claim our analysis to be the only defendable outcome of a content analysis. However, our rate of agreement and the clarity of the overall opinions regarding support or non-support of the impairment-only approach in comparison to amortization strengthen our belief that we provide a representative, neutral depiction of the perceptions of stakeholders.

In addition to that, our analysis is limited to the comment letters publicly available and therefore, the results only represent few stakeholders' opinions in comparison to the whole IFRS community. With regard to our review of academic research, we cannot claim our findings to be the result of a holistic review. However, regarding the overall questions, we feel confident that we have reviewed a sufficient volume of evidence to effectively reflect on the perceptions expressed by the comment letter responses and on this basis, to reliably derive our suggestions for improvement.

Appendix 1: Arguments used during the Discussion about the Introduction of Impairment-only approach in 2004

Arguments in support of the impairment-only approach:

- The useful life of acquired goodwill and the pattern in which it diminishes generally are not possible to predict and thus the amount amortized is an arbitrary estimate of the consumption of acquired goodwill (IFRS 3 (2004).BC140).
- If a rigorous and operational impairment test could be devised, more useful information would be provided (IFRS 3 (2004).DO14 / BC132; IAS 36 (2004).BC131)).

Arguments against the impairment-only approach:

- Amortization is a well-established and well-understood practice (IFRS 3 (2004).DO8).
- With amortization management is made accountable for its expenditure on goodwill (IFRS 3 (2004).DO9).
- Amortization is simple and transparent (less likely to mislead the market) (IFRS 3 (2004).DO10).
- Amortization of acquired goodwill over its useful life reflects its consumption over that useful life more representationally faithful than the impairment-only approach (IFRS 3 (2004).DO11)
- The abolition of goodwill amortization in favor of an impairment-only approach is inconsistent with the general principle that internally generated goodwill should not be recognized (IFRS 3 (2004).DO11).
- It cannot be established that the impairment-only approach pass the cost/benefit test for the majority of entities affected. The costs of the im-

pairment tests are likely to be high and the benefits may be diminished by their potential unreliability (IFRS 3 (2004).DO12).

- Including internally generated goodwill in the measure of goodwill will inappropriately provide ‘cushions’ against recognizing impairment losses that have in fact occurred in respect of the acquired goodwill (IFRS 3 (2004).DO13).
- Amortization is an practical solution and provides an appropriate balance between conceptual soundness and operationality at an acceptable cost ((IFRS 3 (2004).BC139(b)).
- With the impairment-only approach it would be difficult to identify CGUs at a level other than the business as a whole and, therefore, impairment losses would never be recognized for individual assets (IAS 36 (2004).BCZ113).

Appendix 2: Description of Criteria Used in Content Analysis

In the following, we explain the meaning of the arguments according to which the comment letters have been analyzed, where necessary. Because of the high granularity and the large number of arguments, the lines between the arguments are not clear-cut in every case. Some of the potential interrelationships are addressed in the explanations.

Arguments pro impairment-only approach/contra amortization

Usefulness Criteria - Relevance Criteria

The *Relevance* arguments used in favor of the impairment-only approach (IoA) include responses that claimed that (1) the **IoA provides more useful information than amortization**, (2) **Amortization is not of significant value to users**, (3) **Information provided by IoA has predictive value** and (4) **Information provided by IoA is relevant/has confirmatory value**. While argument (3) includes only respondents that view impairment information as having predictive value, bringing new information to the market or being a signal, argument (4) includes comments that value the confirmatory nature of impairment information as well as general statements that information provided by the impairment-only approach is relevant.

Furthermore, the subcategory *Stewardship/Accountability* includes responses that stated that (5) **Impairment testing ensures accountability for investments made and provides insights into management views**. This criterion encompasses stewardship and accountability aspects, e.g. a better assessment of the performance of the acquired business or the realization of synergies, as well as the benefits of the current accounting model regarding the provision of information about the views of the management about the acquired business. The subcategory *Disclosures* contains the argument that (6) **Disclosures provide useful additional information**. The main benefit is seen in the disclosure of key assumptions that have been used in the impairment test.

Usefulness Criteria - Faithful Representation Criteria

Two arguments make up for the *Faithful Representation* subcategory. (7) **Amortization is an arbitrary estimate of consumption of goodwill** was one of the main arguments used in the introduction of the impairment-only approach. The underlying rationale is that, generally, the useful life of acquired goodwill as well as the pattern in which it diminishes are not possible to predict. The argument also includes those respondents claiming conceptual superiority of the impairment-only model compared to amortization.

The argument (8) **Disclosures/Guidance ensure reliability of IoA** has also already been used by the IASB when introducing the impairment-only approach (IAS 36 (2004).BC198). This argument claims that disclosure requirements and guidance (e.g. regarding the definition of CGUs) improve the reliability of the impairment-only approach and is used as a counterargument to those that argue that impairment tests are not reliable due to the high level of discretion.

Cost Considerations

The only considerable argument used was the claim that a return to (9) **Amortization does not remove the need to conduct impairment tests**, since indication-based tests would still be required. If the impairment review would not be done regularly costs would not be reduced substantially, since firms still must be able to conduct the test in case of impairment indications, while the quality of the tests would suffer.

Other Criteria

This category includes arguments ((10) **Other)** that have seldomly been mentioned or are hardly connected to the goal of financial reporting or cost-benefit considerations. Examples include stakeholders that argued that due to the impairment-only approach, the acquirer better analyzes the transaction before the closure, e.g. through the use of scenarios, or stakeholders that emphasized that many other aspects of accounting also involve judgment about estimates and assumptions and thus this would not be a particular problem of the impairment-only regime. Another example is the argument that, over time, firms have improved their impairment tests due to the annual review of goodwill which has resulted in a more rigorous test.

Arguments contra impairment-only approach/pro amortization

Usefulness Criteria - Relevance Criteria

The *Relevance* arguments used against the impairment-only approach include responses that claimed that (11) the **IoA does not provide useful information - impairment charges come too late** which focuses on the aspect that impairment charges often come too late and do not provide new information (no signal) to the market. Respondents using this argument also stated that necessary impairments are often delayed until a time when the impairment is already anticipated and reflected in share prices. The *Relevance* category further includes comments claiming that (12) the **Information of IoA is not used by users**, for example because analysts would eliminate impairment charges in order to enhance the comparability of information on profit or loss.

The argument (13) that the **IoA leads to recognition of internally generated goodwill** has already been brought forward during the discussion upon the introduction of the non-amortization approach in the early 2000s. Respondents explained that the recognition of internally-generated goodwill is inconsistent with the principles of IAS 38, may provide a cushion against the recognition of impairment losses, and deteriorates comparability among companies growing organically and those growing anorganically. Argument (14) stems from the view that **No impairment losses are recognized because of test on high CGU-level** and, thus, is a source for interrelationships between arguments, since the claim that a cushion built by internally-generated goodwill (argument no. 13) also points to the assumption that no impairments will be charged, and argument (23, see below) addresses also questions around the topical matter of CGUs including discretion in determining the test level. Similarly, argument (15), **Goodwill is tested on CGUs that are subject to restructuring - Disconnection between what has been bought and what is tested**, touches the concept of CGUs, but focuses on the fact that, after reorganizations, goodwill is tested on CGUs that might have little similarities to the originally acquired business. The argument further includes respondents that only complained about the disconnection between what is tested by impairment tests and what has been bought originally without referring explicitly to the restructuring of CGUs.

In addition to the arguments above, *Stewardship/Accountability* has also been brought forward against the impairment-only approach. Argument (16) **Amortization means greater accountability** includes responses claiming that amortization charges to profit or loss mean greater accountability of management decisions, especially because this provides a link between income and costs of from an acquisition. Other opinions expressed were that analysts are interested in the expected payback period and view amortization of goodwill over this period as useful information in terms of stewardship. Moreover, argument (17) **Insufficient/Inappropriate/non-entity-specific/redundant/unnecessary disclosures** includes comments stating that the disclosure requirements regarding the impairment test are not sufficient, e.g. to understand the results and the level of judgment applied, too excessive or unnecessary, or conveying sensitive information. In summary, respondents that are complaining about the disclosure requirements themselves (and not about their application in practice, see argument no. 28) have been assigned to this argument.

Usefulness Criteria - Faithful Representation Criteria

Argument (18) contains all responses that argued that **Amortization over useful life reflects consumption of goodwill more representationally faithful than IoA**, e.g. because, although amortization may be arbitrary, the fact that the value of goodwill diminishes over its useful life cannot be ignored. Argument (19) **Amortization is well-understood and well-established in practice and leads to consistent application** focuses on the practical benefits of amortization compared to the impairment-only approach which include easy and more consistent application expected to result in higher comparability. Moreover, respondents argued against the impairment-only approach emphasizing that (20) **Goodwill is an asset with limited useful life**. This argument includes statements claiming that the useful life of goodwill is predictable, because the acquirer has an expectation of how synergies are realized or, because of the experience gained since IFRS 3 is applied, firms developed professional judgment allowing the determination of an appropriate amortization period for each business acquired. Moreover, the argument that the useful life of goodwill is not predictable is claimed to be not a valid argument, since the same is true for other assets and estimations are inherent in accounting. Argument (21) **IoA reduces comparability between organically and anorganically grown companies** includes comments that argue that amortization of goodwill would increase comparability between entities that grow organically and those growing primarily through acquisitions.

Usefulness Criteria - Faithful Representation Criteria: Operational and Rigor

Among the *Faithful Representation Criteria*, a subgroup of arguments complaints about the impairment test not being *Operational and Rigor*. Importantly, argument (22) **High judgment and managerial discretion regarding estimates and assumptions** includes comments criticizing the impairment provisions and pointing out the potential for (opportunistic) earnings management reducing the reliability of impairment information. This argument encompasses views complaining about the subjectivity and the resulting implications for auditors, i.e. audibility is problematic and audit risk increases. Argument (23) **Managerial discretion in identification and restructuring of and goodwill allocation to CGUs** also complains about the subjectivity inherent in the current impairment approach with regard to CGU-related questions including the level of the impairment test.

Arguments (24) **Impairment testing is a complex exercise** and (25) **Goodwill impairment is difficult in presence of non-controlling interests** include general and more specific complaints about the complexity of the impairment model of IAS 36 from the perspective of preparers. The arguments (26) **Valuation concept value in use has shortcomings** and (27) **Valuation concept fair value less costs of disposal has shortcomings** address problems with the value concepts currently used in order to determine the recoverable amount according to IAS 36. Difficulties are mentioned for example with the determination of the discount rate or the projection of future cash flows.

Argument (28) **Compliance with disclosure requirements is not fulfilled** includes responses that complained about the application of the disclosure requirements (and not with the requirements themselves, see argument no. 17).

Cost Considerations

Argument (29) **Impairment test is costly and time-consuming** includes all concerns about high costs and effort originating from the need to conduct annual reviews as well as comments explicitly referring to an unfavorable cost-benefit relation.

Other

Several arguments have been used against the impairment-only approach which cannot be subsumed into the categories above. Likewise to those respondents that claimed impairment information to be of no interest to users, others pointed out that (30) **Information of IoA is not used by the preparer's management** which is, of course, not the goal of financial reporting according to the Conceptual Framework of the IASB and thus included here. Argument (31) includes comments that argue that **Amortization reduces pressure on identification of intangibles in PPA and determination between asset acquisitions and business**. The arguments (32) **IoA is pro-cyclical when performance is low** and (33) **IoA increases volatility of profit and loss** point to the negative spiral which firms may experience through additional impairment charges in times when their performance is low and the less regular impact on profit or loss in comparison to annual amortization charges. Moreover, the *Other* category includes the argument (34) **Other reporting regimes allow amortization** and all arguments against the impairment-only approach that were not assigned to the arguments above ((35) **Other**). Examples of the latter include responses which refer to the IASB project related to loan-loss provisioning with which amortization is seen to be more consistent or a comment that the gearing ratio has lost its significance because of delayed impairments led to inflated equity.

Appendix 3: Summary of Notable Goodwill Accounting Studies published in Accounting Journals (2000-2014)

Panel A

Accounting journals searched for goodwill accounting:

Searched Journals

Journal acronyms	Journal name	Journal ranking by		
		ABS (2010)	ARC (ERA 2010)	VHB (2011)
ABACUS	ABACUS: a Journal of Accounting and Business Studies	3	A	B
ABR	Accounting and Business Research	3	A	B
A&F	Accounting and Finance	2	B	C
AAAJ	Accounting Auditing and Accountability Journal	3	A*	C
ABFH	Accounting, Business and Financial History	2	A	B
AF	Accounting Forum	3	B	-
AHi	Accounting History	2	A	-
AHo	Accounting Horizons	3	A	C
AOS	Accounting, Organizations and Society	4	A*	A
AR	Accounting Review	4	A*	A
AiA	Advances in Accounting	-	A	C
AJPT	Auditing: A Journal of Practice and Theory	2	A	B
AAR	Australian Accounting Review	-	B	-
BRA	Behavioral Research in Accounting	3	A	B
BAR	British Accounting Review	3	A	C
CJAS	Canadian Journal of Administrative Sciences	2	-	-
CAR	Contemporary Accounting Research	3	A*	A
CPA	Critical Perspective on Accounting	3	A	B
EAR	European Accounting Review	3	A	B
FAM	Financial Accountability and Management	3	A	C
JAEc	Journal of Accounting and Economics	4	A*	A
JAOC	Journal of Accounting and Organizational Change	1	B	B
JAPP	Journal of Accounting and Public Policy	3	A	B
JAAF	Journal of Accounting, Auditing and Finance	3	A	B
JAEd	Journal of Accounting Education	2	A	D
JAL	Journal of Accounting Literature	3	A	B
JAR	Journal of Accounting Research	4	A*	A
JBFA	Journal of Business Finance and Accounting	3	A	B
JIAR	Journal of International Accounting Research	2	B	B
JIFMA	Journal of International Financial Management & Accounting	2	-	-
JMAR	Journal of Management Accounting Research	2	A*	B
MAR	Management Accounting Research	3	A	A
RAS	Review of Accounting Studies	4	A	A
RAF	Review of Accounting and Finance	-	-	-
RQFA	Review of Quantitative Finance and Accounting	3	-	B
IJA	The International Journal of Accounting	3	A	C

Interpretation of ranking: ERA/VHB: A* = Best or leading journal; A = a highly regarded journal; B = a well-regarded journal; C = a regarded Journal; D = modest standard; ABS: 4* = a world elite journal; 4 = a top journal; 3 = a highly regarded journal; 2 = a well-regarded journal; 1 = modest standard; - = not ranked.

Panel B

Results of Empirical Studies Comparing the Usefulness of Non-amortization and Amortization

Study (by year)	Journal	Sample Period	Firm-Year Observations	Country	Accounting Standard	Findings
Chalmers et al. (2008)	AAR	2005-2006	1,198	Australia	IFRS	Goodwill amounts according to IFRS are significantly associated with share prices. Australian-GAAP goodwill measures are not.
Aharonyh et al. (2010)	EAR	2005	2,298	European Union (14 countries)	IFRS	Adoption of IFRS has increased the value relevance of goodwill.
Horton and Serafeim (2010)	RAS	2006	297	UK	IFRS	Stock prices react significantly to the publication of reconciliation documents regarding goodwill from UK GAAP to IFRS.
Olivereia et al. (2010)	BAR	1998-2008	354	Portugal	IFRS	Correlation of goodwill with share prices becomes stronger under IFRS (impairment-only approach).
Chalmers et al. (2011)	A&F	1999-2008	4,310	Australia	IFRS	Impairment is in comparison to amortisation a better method to capture the underlying economic attributes of goodwill.
Moehrle et al. (2001)	AHo	1988-1998	222	USA	US-GAAP	Goodwill amortization disclosures are not decision useful.

Panel C

Results of Empirical Studies regarding Relevance

Study (by year)	Journal	Sample Period	Sample Size	Country	Accounting Standard	Findings
Predictive value						
Hamberg et al. (2011)	EAR	2001-2007	1.691	Sweden	IFRS	Reported earnings increased as a consequence of implementation of impairment-only approach. Stock market revalued companies upwards following the IFRS adoption.
Chalmers et al. (2012)	A&F	1993-2007	3.328	Australia	IFRS	Analyst forecast error decreased with introduction of IFRS. Impairment-only approach conveys more useful information than amortisation.
Jarva (2009)	JBF&A	2002-2005	327	USA	US-GAAP	Goodwill write-offs of SFAS 142 are associated with future expected cash flows.
Lee (2011)	JAPP	1995-2006	13.848	USA	US-GAAP	Goodwill's ability to predict future cash flows has improved since the FASB adopted SFAS 142.
Zang (2008)	RAF	2002	969	USA	US-GAAP	Only unanticipated portions of goodwill impairments convey unfavorable news to the market, whereas the expected portions do not.
Li et al. (2011)	RAS	1996-2006	1.584	USA	US-GAAP	Investors and analysts revise their expectations downward on the announcement of an impairment charge. Goodwill impairment is a leading indicator of a decline in future profitability.
Chen et al. (2008)	AiA	2002	1.763	USA	US-GAAP	Indication that timeliness can be improved after adoption of SFAS 142.
Bens et al. (2011)	JAA&F	1996-2006	388	USA	US-GAAP	Reduction of information content of goodwill impairments after introduction of SFAS 142.
Confirmatory value						
Hayn and Hughes (2006)	JAAF	1988-1998	1.276	USA	US-GAAP	Write-offs lag behind the economic deterioriation of acquired assets for a number of years.
Li and Sloan (2014)	-	1996-2011	3.883	USA	US-GAAP	Goodwill impairments in the period before implementation of SFAS 142 are timelier than after the introduction of the impairment-only approach.
Disclosure						
Financial Reporting Council (2008)	-	2007	32	UK	IFRS	Review team assessed the disclosures of 17 companies regarding IAS 36 as rather uninformative.
European Securities and Markets Authority (2013)	-	2011	235	Europe	IFRS	The disclosures of IAS 36 are in many cases of a boilerplate nature and not entity-specific.

Panel D

Study (by year)	Journal	Sample Period	Sample Size	Country	Accounting Standard	Findings
Results of Empirical Studies regarding Earnings Management						
Smoothing / big bath						
Siggelkow and Zuelch (2013)	IB&ERJ	2005-2011	7.268	EU	IFRS	Study indicates support for big bath accounting and income smoothing. Write-off magnitude is used for earnings management.
Chao and Horng (2013)	RQF&A	2005-2007	1.113	Taiwan	IFRS	Managers use discretionary write-offs and abnormal accruals jointly to reach earnings targets.
Van den Poel et al. (2009)	-	2005-2006	2.262	EU	IFRS	The authors focus on earnings management and show that companies consider earnings smoothing / big bath.
Debt contracting						
Beatty and Weber (2006)	JAR	2001	176	USA	US-GAAP	Lower probability to consider impairment charges if companies face binding debt covenants.
Ramanna and Watts (2012)	RAS	2003-2006	124	USA	US-GAAP	Association between non-goodwil impairment and debt-covenant violation concern.
Management compensation						
Darrough et al. (2014)	JAA&F	2002-2009	3.543	USA	US-GAAP	Lower total compensation. Significant reduction in cash- and option-based CEO compensation.
Lapointe-Antunes et al. (2008)	CJAS	2002	331	Canada	US-GAAP / Canadian GAAP	Lower probability of goodwill charges for firms where top executives hold high proportions of in-the-money stock options.
Reputation						
Masters-Stout et al (2007)	CPA	2003-2005	990	USA	US-GAAP	Evidence that new CEOs recognize impairments in the early years of their tenure.
AbuGazaleh et al (2011)	JIFM&A	2005-2006	528	UK	IFRS	Goodwill impairment charges are more likely to be associated with recent CEO changes.

Panel E

Study (by year)	Journal	Sample Period	Firm-Year Observations	Country	Accounting Standard	Findings
Results of Empirical Studies regarding Managerial Discretion and Cash Generating Units						
Glaum and Wyrwa (2011)	-	2009	322	EU (12 countries)	IFRS	Goodwill is concentrated in only relatively few CGUs.
Duff & Phelps (2013)	-	2012	115	USA	US-GAAP	Two-third of public companies has five or less reporting units.

Panel F

Study (by year)	Journal	Sample Period	Firm-Year Observations	Country	Accounting Standard	Findings
Results of Empirical Studies Regrading Non-Compliance of Disclosures						
Glaum et al. (2013)	ABR	2005	357	EU (17 countries)	IFRS	Substantial non-compliance with disclosures of IAS 36
Carlin and Finch (2010)	JAOC	2006-2007	100	Australia	IFRS	High level of non-compliance with goodwill accounting requirements following the two years after adoption of IFRS.

References

ABUGHAZALEH, N. M., AL-HARES, O. M., ROBERTS, C. (2011). Accounting discretion in goodwill impairments: UK evidence. *Journal of International Financial Management & Accounting*, 22(3), 165-204.

AHARONY, J., BARNIV, R., FALK, H. (2010). The impact of mandatory IFRS adoption on equity valuation of accounting numbers for security investors in the EU. *European Accounting Review*, 19(3), 535-578.

BARTH, M.E., BEAVER, W. H., LANDSMAN, W. R. (2001). The relevance of the value-relevance literature for financial accounting standard setting: Another view. *Journal of Accounting and Economics*, 31(1–3), 77-104.

BEATTY, A., WEBER, J. (2006). Accounting Discretion in fair value estimates: An examination of SFAS 142 goodwill impairments. *Journal of Accounting Research*, 44(2), 257-288.

BENS, D. A., HELTZER, W., SEGAL, B. (2011). The information content of goodwill impairments and SFAS 142. *Journal of Accounting, Auditing and Finance*, 26(3), 527-555.

BOENNEN, S., GLAUM, M. (2014). Goodwill accounting: A review of the literature. SSRN-Working Paper, June 2014. Available at: http://ssrn.com/abstract=2462516.

CAMFFERMAN, K., ZEFF, S. A. Financial reporting and global capital markets: A history of the International Accounting Standards Committee, 1971-2000. Oxford University Press, Oxford, 2006.

CARLIN, T. M., FINCH, N. (2010). Resisting compliance with IFRS goodwill accounting and reporting disclosures: Evidence from Australia. *Journal of Accounting and Organizational Change*, 6(2), 260-280.

CHALMERS, K., CLINCH, G., GODFREY, J. M. (2008). Adoption of International Financial Reporting Standards: Impact on the value relevance of intangible assets. *Australian Accounting Review*, 18(3), 237-247.

CHALMERS, K., CLINCH, G., GODFREY, J. M., WEI, Z. (2012). Intangible assets, IFRS and analyst' earnings forecast. *Accounting and Finance*, 52, 691-721.

CHALMERS, K., GODFREY, J. M., WEBSTER, J. C. (2011). Does a goodwill impairment regime better reflect the underlying economic attributes of goodwill?. *Accounting and Finance*, 51, 634-660.

CHAO, C.-L., HORNG, S.-M. (2013). Asset write-offs discretion and accruals management in Taiwan: The role of corporate governance. *Review of Quantitative Finance and Accounting*, 40, 41-71.

CHATHAM, M. D., LARSON, R. K., VIETZE, A. (2010). Issues affecting the development of an international accounting standard on financial instruments. *Advances in Accounting*, 26, 97-107.

CHEN, C., KOHLBECK, M., WARFIELD, T. (2008). Timeliness of impairment recognition: Evidence from the initial adoption of SFAS 142. *Advances in Accounting*, 24, 72-81.

COHEN, J. (1960). A coefficient of agreement for nominal scales. *Educational and Psychological Measurement*, 20(1), 37–46.

DARROUGH, M. N., GULER, L., WANG, P. (2014). Goodwill impairment losses and CEO compensation. *Journal of Accounting, Auditing and Finance*, Published online before print June 24, 2014.

DING, Y., RICHARD, J., STOLOWY, H. (2008). Towards an understanding of the phase of goodwill accounting in four Western capitalist countries: From stakeholder model to shareholder model. *Accounting, Organizations and Society*, 33,718-755.

DUFF & PHELPS (2013). 2013 U.S. goodwill impairment study. November 2013.

DUROCHER, S., FORTIN, A., COTE, L. (2007). Users' participation in the accounting standard-setting process: A theory-building study. *Accounting, Organization and Society*, 32, 29-59.

EUROPEAN SECURITIES AND MARKETS AUTHORITY REPORT (2013). European enforcers review of impairment of goodwill and other intangible assets in the IFRS financial statements. January 2013, ESMA/2013/2.

EWERT, R., WAGENHOFER, A. (2012). Using academic research for the post-implementation review of accounting standards: a note. *Abacus*, 48(2), 278-291.

FINANCIAL ACCOUNTING STANDARDS BOARD (FASB) (2014). Accounting for Goodwill for Public Business Entities and Not-for-Profits. Available at: http://www.fasb.org/jsp/FASB/FASBContent_C/ProjectUpdatePage&cid=1176163679475 (last retrieved: August 05, 2014).

FINANCIAL REPORTING COUNCIL (2008). Review of goodwill impairment disclosures.

FÜLBIER, R. U., HITZ, J.-M., SELLHORN, T. (2009). Relevance of academic research and researchers‘ role in the IASB's financial reporting standard setting, in: *Abacus*, 45, 455-492.

GILMAN, S. Principles of Accounting. La Salle Extension University, Chicago, 1916.

GINER, B., ARCE, M. (2012). Lobbying on accounting standards: Evidence from IFRS 2 on share-based payments. *European Accounting Review*, 21(4), 655-691.

GLAUM, M., SCHMIDT, P., STREET, D. L., VOGEL, S. (2013). Compliance with IFRS 3- and IAS 36-required disclosures across 17 European countries: company- and country-level determinants. *Accounting and Business Research*, 43(3), 163-204.

GLAUM, M., WYRWA, S. (2011). Making acquisitions transparent: Goodwill accounting in times of crisis. Fachverlag Moderne Wirtschaft, Frankfurt am Main, 2011.

HAMBERG, M., PAANANEN, M., NOVAK, J. (2011). The adoption of IFRS 3: The effects of managerial discretion and stock market reactions. *European Accounting Review*, 20(2), 263-288.

HAYN, C., HUGHES, P. J. (2006). Leading indicators of goodwill impairment. *Journal of Accounting, Auditing and Finance*, 21(3), 223-265.

HEALY, P. M., WAHLEN, J. M. (1999). A review of the earnings management literature and its implications for standard setting. *Accounting Horizons*, 13(4), 365-383.

HORTON, J., SERAFEIM, G., (2010). Market reaction to and valuation of IFRS reconciliation adjustments: First evidence from the UK. *Review of Accounting Studies*, 15(4), 725-751.

IFRS FOUNDATION (2013). Due Process Handbook. Available at: http://www.ifrs.org/DPOC/Documents/2013/Due_Process_Handbook_Resupply_28_Feb_2013_WEBSITE.pdf (last retrieved: August 5, 2014).

INTERNATIONAL ACCOUNTING STANDARDS BOARD (2013a). Post-implementation review of IFRS 8 – project page. Available at: http://www.ifrs.org/Current-Projects/IASB-Projects/PIR/IFRS-8/Pages/IFRS-8.aspx (last retrieved: August 14, 2014).

INTERNATIONAL ACCOUNTING STANDARDS BOARD (2013b). Report and Feedback Statement PIR IFRS 8. Available at: http://www.ifrs.org/Current-Projects/IASB-Projects/PIR/IFRS-8/Documents/PIR-IFRS-8-Operatihg-Segments-July-2013.pdf (last retrieved: August 5, 2014).

INTERNATIONAL ACCOUNTING STANDARDS BOARD (2014a). IFRS Research Round-up, Issue 1, April 2014. Available at: http://www.ifrs.org/IFRS-Research/Stay-informed/Documents/IFRS-Research-Round-up-April-2014.pdf (last retrieved: August 5, 2014).

INTERNATIONAL ACCOUNTING STANDARDS BOARD (2014b). Post-implementation Review of IFRS 3 Business Combinations – project page. Available at: http://www.ifrs.org/Current-Projects/IASB-Projects/PIR/PIR-IFRS-3/Pages/PIR-IFRS-3.aspx (last retrieved:accessed August 14, 2014).

INTERNATIONAL ACCOUNTING STANDARDS BOARD (2014c). Request for Information: Post-implementation Review: IFRS 3 Business Combinations. Available at: http://www.ifrs.org/Current-Projects/IASB-Projects/PIR/PIR-IFRS-3/Request-for-Information-January-2014/Documents/RfI_PIR_IFRS3-Business-Combinations.pdf (last retrieved: August 5, 2014).

JARVA, H. (2009). Do firms manage fair value estimates? An examination of SFAS 142 goodwill impairments. *Journal of Business Finance and Accounting*, 36(9-10), 1059-1086.

KENNY, S. Y., LARSON, R. K. (1995). The development of International Accounting Standards: An analysis of constituent participation in standard-setting. *The International Journal of Accounting*, 30(4), 293-301.

KIRSCH, R. J. The International Accounting Standards Committee: A political History. Wolters Kluwer (UK) Limited, 2006.

KVAAL, E., NOBES, C. (2012). IFRS Policy Changes and the continuation of national patterns of IFRS practice. *European Accounting Review*, 21(2), 343-371.

KWOK, W. C. C. (1999). Development of International Accounting Standards: An analysis of power and policy-making. Ph.D. dissertation, University of Western Ontario.

LAPOINTE-ANTUNES, P., CORMIER, D., MAGNAN, M. (2008). Equity recognition of mandatory accounting changes: The case of transitional goodwill impairment losses. *Canadian Journal of Administrative Sciences*, 25, 37-54.

LARSON, R. K. (2002). The IASC's search of legitimacy: An analysis of the IASC's Standing Interpretations Committee. *Advances in International Accounting*, 15, 79-120.

LARSON, R. K. (2007). Constituent participation and the IASB's International Financial Reporting Interpretations Committee. *Accounting in Europe*, 4(2), 1-47.

LEE, C. (2011). The effect of SFAS 142 on the ability of goodwill to predict future cash flows. *Journal of Accounting and Public Policy*, 30, 236-255.

LI, Z., SHROFF, P., VENKATARAMN, R., ZHANG, I. X. (2011). Causes and consequences of goodwill impairment losses. *Review of Accounting Studies*, 16(4), 745-778.

LI, K.K., SLOAN, R. G. (2014). Has Goodwill Accounting Gone Bad?, Working Paper.

MACARTHUR, J. B. (1996). An Investigation into the influence of cultural factors in the international lobbying of the International Accounting Standards Committee: The case of E32, Comparability of Financial Statements. *The International Journal of Accounting*, 31(2), 213-237.

MACARTHUR, J. B. (1999). The impact of cultural factors on the lobbying of the International Accounting Standards Committee on E32, Comparability of Financial Statements: An extension of MacArthur to accounting member bodies. *Journal of Accounting, Auditing and Taxation*, 8(2), 315-335.

MASTERS-STOUT, B., COSTIGAN, M. L., LOVATA, L. M. (2008). Goodwill impairments and chief executive officer tenure. *Critical Perspective on Accounting*, 19, 1370-1383.

MOEHRLE, S. R., REYNOLDS-MOEHRLE, J. A., WALLACE, J. S. (2001). How informative are earnings number that exclude goodwill amortization?. *Accounting Horizons*, 15(3), 243-255.

MUELLER, G. G., GERNON, H., MEEK, G. K. Accounting: An international perspective. 4th ed. Chicago: Irwin, 1997.

OLIVEIRA, L., RODRIGUES, L. L., CRAIG, R. (2010). Intangible assets and value relevance: Evidence from the Portuguese stock exchange. *The British Accounting Review*, 42(4), 241-252.

RAMANNA, K. (2008). The implication of unverifiable fair-value accounting: Evidence from the political economy of goodwill accounting. *Journal of Accounting and Economics*, 45, 253-281.

RAMANNA, K., WATTS, R. (2012). Evidence on the use of unverifiable estimates in required goodwill impairment. *Review of Accounting Studies*, 17(4), 749-780.

RONEN, J., YAARI, V. Earnings management: Emerging insights in theory, practice, and research. Springer, New York, 2008.

SCHAUB, A. (2005). The use of International Accounting Standards in the European Union. *Northwestern Journal of International Law and Business*, 25, 608-629.

SIGGELKOW, L., ZÜLCH, H. (2013). What drives companies? An analysis of fixed asset write-offs in Europe in the context of different institutional setting. HHL Working Paper 115, Leipzig: HHL Graduate School of Management, 2013.

STRONG, J. S., MEYER, J. R. (1987). Asset writedowns: Managerial incentives and security returns. *The Journal of Finance*, 42, 643-661.

TRUEMAN, B., TITMAN, S. (1988). Explanation for accounting income smoothing. *Journal of Accounting Research*, 26, 27-139.

TWEEDIE, D., SEIDENSTEIN, T. R. (2005). Setting a global standard: The case for accounting convergence. *Northwestern Journal of International Law and Business*, 25, 589-608.

VAN DE POEL, K., MAIJOOR, S., VANSTRAELEN, A. (2009). IFRS goodwill impairment test and earnings management: The influence of audit quality and the institutional environment. Working Paper, Universiteit Antwerpen.

WALLACE, R. S. O. (1990). Survival strategies of a global organization: the case of International Accounting Standards Committee. *Accounting Horizons*, 4(June), 1-22.

WALSH, P., CRAIG, R., CLARKE, F. (1991). Big bath accounting using extraordinary items adjustments: Australian empirical evidence. *Journal of Business Finance & Accounting*, 18, 173-189.

ZANG, Y. (2008). Discretionary behavior with respect to the adoption of SFAS no. 142 and the behavior of security prices. *Review of Accounting and Finance*, 7(1), 38-68.

VI.

IMPAIRMENT OF GOODWILL AND DEFERRED TAXES UNDER IFRS

MANUSCRIPT E.

Dr. Dominic Detzen
Assistant Professor
Vrije Universiteit Amsterdam
De Boelelaan 1105, 1081 HV Amsterdam
email: d.detzen@vu.nl
tel. +31 (0) 20 – 598 2134

Tobias Stork genannt Wersborg
Research Associate
HHL Leipzig Graduate School of Management
Chair of Accounting and Auditing
Jahnallee 59, D-04109 Leipzig
email: Tobias.Stork-Wersborg@hhl.de
tel. +49 (0) 3 41 – 9851 676

Prof. Dr. Henning Zülch
Professor of Accounting
HHL Leipzig Graduate School of Management
Chair of Accounting and Auditing
Jahnallee 59, D-04109 Leipzig
email: Henning.Zuelch@hhl.de
tel. +49 (0) 3 41 – 9851 701

The authors gratefully acknowledge the comments and suggestions received by Kees Camfferman and Sebastian Hoffmann on earlier drafts.

This manuscript is in the status of “revised to resubmit” in *Australian Accounting Review* (ISSN 1835-2561). For copyright reasons, pages 324-352 were excluded from this version of my dissertation.

Eidesstattliche Versicherung

Versicherung nach § 9 Abs. 3 der Promotionsordnung der HHL Leipzig Graduate School of Management vom 3. Dezember 2009:

Hiermit versichere ich, dass ich die vorliegende Arbeit ohne unzulässige Hilfe Dritter und ohne Benutzung anderer als der angegebenen Hilfsmittel angefertigt habe; die aus fremden Quellen direkt oder indirekt übernommenen Gedanken sind als solche kenntlich gemacht. Bei der Auswahl und Auswertung des Materials sowie bei der Herstellung des Manuskripts habe ich keine Unterstützungsleistungen erhalten. Dritte haben von mir weder unmittelbar noch mittelbar geldwerte Leistungen für Arbeiten erhalten, die im Zusammenhang mit dem Inhalt der vorgelegten Dissertation stehen. Die Arbeit wurde bisher weder im Inland noch im Ausland in gleicher oder ähnlicher Form einer Prüfungsbehörde vorgelegt. Mit der vorliegenden Arbeit wurde an anderen wissenschaftlichen Hochschulen noch kein Promotionsverfahren in Wirtschaftswissenschaften beantragt.

Hamburg, 29. November 2014

Tobias Stork genannt Wersborg

LEIPZIG
GRADUATE SCHOOL
OF MANAGEMENT